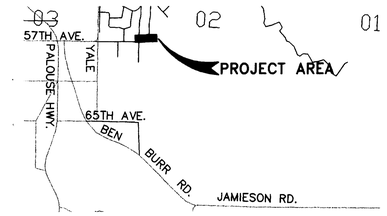
MORAN VIEW ESTATES

IN THE SOUTH 1/2, OF THE SOUTHWEST 1/4 OF SECTION 2,
TOWNSHIP 24 NORTH, RANGE 43 EAST W.M.
SPOKANE COUNTY, WASHINGTON



VICINITY MAP
NTS

LEGEND

EXISTING FEATURES

- ASPHALT PAVEMENT
- GRAVEL
- CURB
- SIDEWALK
- FOUND POINT AS NOTED
- DRYWELL
- GUY WIRE POLE
- OR POWER POLE
- TELEPHONE ENCLOSURE
- WV WATER VALVE
- WM WATER METER
- FIRE HYDRANT
- WELL
- SANITARY SEWER MANHOLE
- WA WATER LINE
- SS SANITARY SEWER LINE
- SD STORM DRAIN LINE / CULVERT
- OHP POWER LINE (OHP OR UGP)
- OHT TELEPHONE LINE (OHT OR UGT)
- GA GAS LINE – UNDERGROUND
- 1924 CONTOURS
- X FENCE
- FO FIBER OPTIC LINE
- TREE – CONIFER

PROPOSED IMPROVEMENTS

- ASPHALT SURFACING
- GRAVEL
- CURB
- SIDEWALK
- DRYWELL
- STORM MANHOLE
- OR CONCRETE INLET
- POWER POLE
- WATER VALVE
- FIRE HYDRANT
- WS WATER SHUTOFF / WATER VAULT
- SANITARY SEWER MANHOLE
- CO CLEANOUT (CO)
- 8"WA WATER LINE (AS SIZED)
- SLEEVE FOR WATER / SEWER CROSSING
- 8"SS SANITARY SEWER LINE (AS SIZED)
- STORM DRAIN LINE / CULVERT
- UTILITY TRENCHING
- GAS LINE TRENCHING
- 1924 CONTOURS
- STORM WATER SWALE / POND
- DIRECTION OF SURFACE STORM WATER DRAINAGE
- 1924.50 TOP OF CURB ELEVATION / 1924.00 FLOWLINE ELEVATION
- CURB INLET / 1924.00 CURB INLET INLET ELEVATION AT FLOWLINE
- 1924.00 FINISHED GRADE ELEVATION
- 1924.00 TW TOP OF WALL ELEVATION / 1923.50 BW BOTTOM OF WALL ELEVATION

SHEET INDEX

SHEET 1	COVER / INDEX SHEET – ROAD AND STORM DRAINAGE
SHEET 2	EROSION / SEDIMENT CONTROL PLAN
SHEET 3	EROSION / SEDIMENT CONTROL DETAILS
SHEET 4	65TH. AVENUE PLAN AND PROFILE, STA. 40+07 TO STA. 49+30
SHEET 5	65TH. AVENUE PLAN AND PROFILE, STA. 49+30 TO STA. 52+80
SHEET 6	65TH. AVENUE PLAN AND PROFILE, STA. 0+00 TO STA. 13+80
SHEET 7	65TH. AVENUE PLAN AND PROFILE, STA. 13+80 TO STA. 26+70.64
SHEET 8	CUSTER STREET PLAN AND PROFILE, STA. 0+00 TO STA. 11+15
SHEET 9	DRAINAGE PONDS
SHEET 10	DETAIL SHEET
SHEET 11	RETAINING WALLS PLAN AND PROFILE

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-1784
DATE ACCEPTED: 01-03-06
ACCEPTANCE EXPIRES: 03-14-07
PROJECT LANE MILES PUBLIC: .40
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

* Original mylar set (11 Shts.) given further time extension.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-1784
DATE ACCEPTED: 11-14-13
ACCEPTANCE EXPIRES: 05-14-14
PROJECT LANE MILES PUBLIC: .40
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

* Mylar set (11 Shts.) dated 05/16/06 extended to current preliminary plat EOT expiration date. (KM)

CERTIFICATION

THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO THE APPLICABLE EDITIONS OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORM WATER MANAGEMENT. I APPROVE THESE PLANS FOR CONSTRUCTION.

CARSTON B. MORTENSON, P.E. — DATE 5/16/06

DEVELOPER — DATE 5/16/06

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
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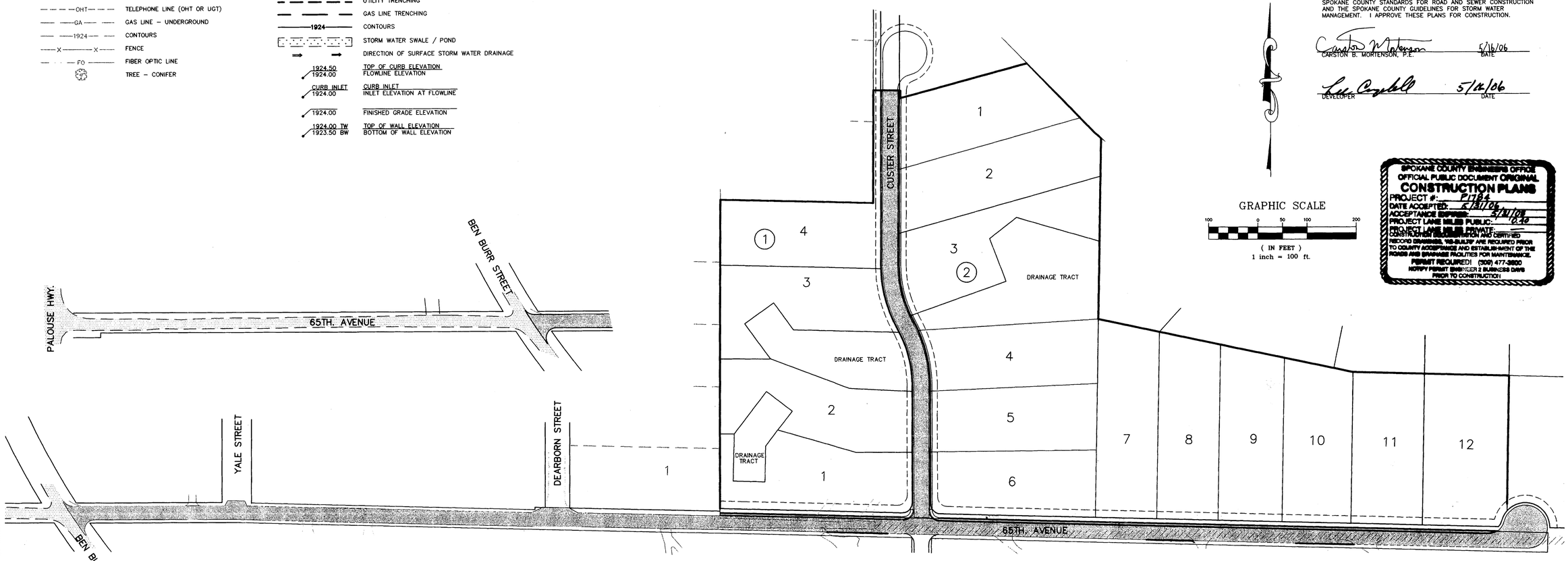

CALL BEFORE YOU DIG 456-8000

No.	DESC. / DATE	BY
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STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: COVER / INDEX SHEET
ROAD AND STORM DRAINAGE

PROJECT TITLE: MORAN VIEW ESTATES
SPOKANE COUNTY, WA

SEAL: CARSTON B. MORTENSON, STATE OF WASHINGTON, 18897, REGISTERED PROFESSIONAL ENGINEER — 5/16/06
EXPIRES 08-07-06

DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	1 OF 11
	COVER

05079-b.DWG ST-COVER

P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, ST-COVER, 1:1, cbm

P-1784 Eng Road Drainage

ER1) An Erosion /Sedimentation Control (ESC) plan is required for this project. Implementation of the ESC plan, and construction, maintenance, and upgrading of the ESC facilities are the responsibility of the Developer until all construction is completed and accepted by Spokane County, or until vegetation is established throughout the site, and accepted by Spokane County, whichever is later.

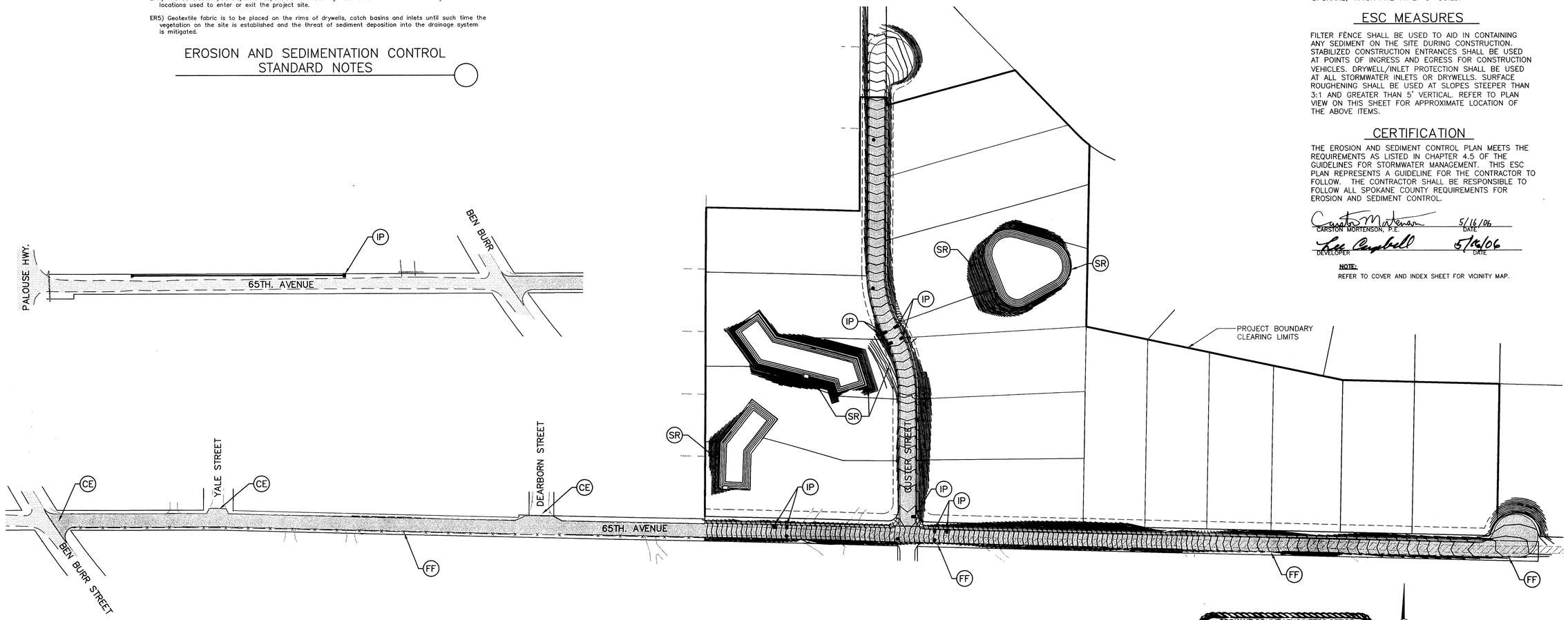
ER2) Approval of the ESC plan does not constitute approval of any of the proposed road, storm drainage, grading or utility design elements shown on the ESC plan.

ER3) The Erosion /Sedimentation control measures shown are the minimum requirements for the anticipated site conditions. The Contractor shall inspect and maintain these ESC measures daily, and shall maintain and upgrade these measures as necessary to prevent sediment-laden water from either flowing off the site, or into new or existing storm drainage facilities, such as drywells, culverts, or gravel galleries.

ER4) The Contractor /Developer is responsible for installing Rock Construction Entries at any and all locations used to enter or exit the project site.

ER5) Geotextile fabric is to be placed on the rims of drywells, catch basins and inlets until such time the vegetation on the site is established and the threat of sediment deposition into the drainage system is mitigated.

EROSION AND SEDIMENTATION CONTROL STANDARD NOTES



CONTACT PERSON
PROPERTY OWNER
PERMIT APPLICANT

LEE CAMPBELL
3105 EAST BOONE AVENUE
SPOKANE, WA. 99202
(509) 536-1818

PROJECT / SITE DESCRIPTION

THE PROPOSED PROJECT INCLUDES THE DEVELOPMENT OF PUBLIC ROADS AND A STORM DRAIN PIPING SYSTEM TO SERVE PROPOSED ONE ACRE PARCELS LOCATED IN MORAN VIEW ESTATES. THE SITE HAS SOME STRUCTURES ON 65TH. AVENUE THE REMAINDER IS CURRENTLY VACANT AND SLOPES TO THE SOUTHWEST.

SOIL TYPE

THE SOILS IN THIS REGION OF THE PROJECT SITE HAVE BEEN IDENTIFIED AS GLENROSE, BERNHILL AND UHLIG SERIES, WHICH ARE TYPE "B" SOILS; AND DRAGOON AND SPOKANE, WHICH ARE TYPE "C" SOILS.

ESC MEASURES

FILTER FENCE SHALL BE USED TO AID IN CONTAINING ANY SEDIMENT ON THE SITE DURING CONSTRUCTION. STABILIZED CONSTRUCTION ENTRANCES SHALL BE USED AT POINTS OF INGRESS AND EGRESS FOR CONSTRUCTION VEHICLES. DRYWELL/INLET PROTECTION SHALL BE USED AT ALL STORMWATER INLETS OR DRYWELLS. SURFACE ROUGHENING SHALL BE USED AT SLOPES STEEPER THAN 3:1 AND GREATER THAN 5' VERTICAL. REFER TO PLAN VIEW ON THIS SHEET FOR APPROXIMATE LOCATION OF THE ABOVE ITEMS.

CERTIFICATION

THE EROSION AND SEDIMENT CONTROL PLAN MEETS THE REQUIREMENTS AS LISTED IN CHAPTER 4.5 OF THE GUIDELINES FOR STORMWATER MANAGEMENT. THIS ESC PLAN REPRESENTS A GUIDELINE FOR THE CONTRACTOR TO FOLLOW. THE CONTRACTOR SHALL BE RESPONSIBLE TO FOLLOW ALL SPOKANE COUNTY REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL.

Carston Mortenson 5/16/06
CARSTON MORTENSON, P.E. DATE

Lee Campbell 5/16/06
DEVELOPER DATE

NOTE:
REFER TO COVER AND INDEX SHEET FOR VICINITY MAP.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/21/06
ACCEPTANCE EXPIRES: 5/21/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: ____
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3209
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.

BENCHMARK
SPIKE IN NW FACE OF POWER POLE S. SIDE OF 65TH. AVENUE ADJACENT TO DEARBORN STREET.
ELEVATION = 2558.96, NAVD 88

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3		
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STORHAUG ENGINEERING
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510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: EROSION / SEDIMENT CONTROL PLAN

PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

SEAL: CARSTON B. MORTENSON, STATE OF WASHINGTON, 20312, REGISTERED PROFESSIONAL ENGINEER 5/16/06
EXPIRES 09-07-06

DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	2 OF 11
	EROSION

05079-b.DWG EROSION

P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, EROSION, 1:1, cbm

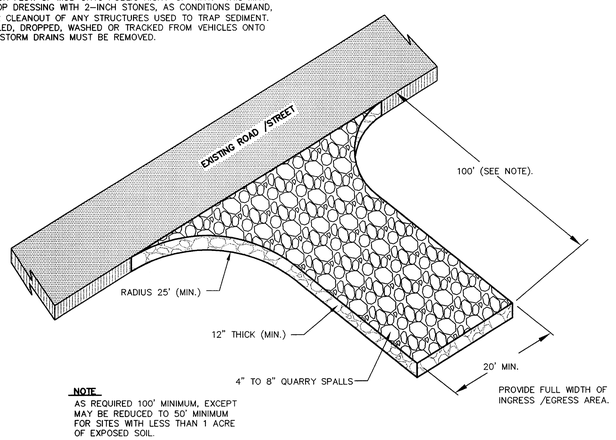
P-1784 Eng/Road/Drainage

DEFINITION: A TEMPORARY STONE-STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

PURPOSE: TO REDUCE THE AMOUNT OF MUD, DIRT, ROCK, ETC. TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF BY CONSTRUCTING A STABILIZED PAD OF ROCK SPALLS AT ENTRANCES TO CONSTRUCTION SITES AND WASHING OF TIRES DURING EGRESS.

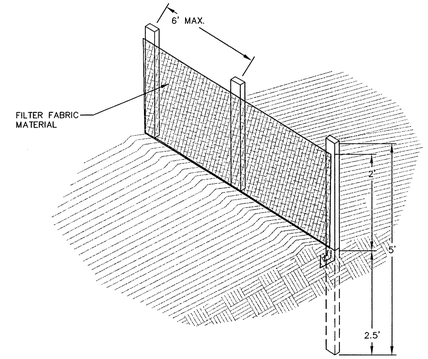
CONDITIONS WHERE PRACTICE APPLIES: WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED AREAS.

MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONES, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED.



NOTE
AS REQUIRED 100' MINIMUM, EXCEPT MAY BE REDUCED TO 50' MINIMUM FOR SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL.

STABILIZED CONSTRUCTION ENTRANCE/ TIRE WASH (CE)
NTS



DEFINITION: A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. THE FILTER FENCE IS CONSTRUCTED OF STAKES AND SYNTHETIC FILTER FABRIC WITH A RIGID WIRE FENCE BACKING WHERE NECESSARY FOR SUPPORT.

PURPOSE: 1. TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT UNDER SHEET FLOW CONDITIONS FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE.

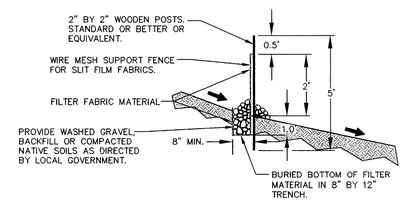
2. TO DECREASE THE VELOCITY OF SHEET FLOWS.

CONDITIONS WHERE PRACTICE APPLIES: FILTER FENCES MUST BE PROVIDED JUST UPSTREAM OF THE POINT(S) OF DISCHARGE OF RUNOFF FROM A SITE, BEFORE THE FLOW BECOMES CONCENTRATED. THEY MAY ALSO BE REQUIRED:

1. BELOW DISTURBED AREAS WHERE RUNOFF MAY OCCUR IN THE FORM OF SHEET AND RILL EROSION; WHEREVER RUNOFF HAS THE POTENTIAL TO IMPACT DOWNSTREAM RESOURCES.

2. PERPENDICULAR TO MINOR SWALES OR DITCH LINES FROM CONTRIBUTING DRAINAGE AREAS UP TO ONE ACRE IN SIZE.

3. CONTRACTOR SHALL COORDINATE WITH DESIGN ENGINEER FOR ACTUAL PLACEMENT LOCATIONS.



FILTER FENCE (FF)
NTS

STANDARD NOTES:

A. THE FILTER FABRIC FENCE SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, OVERLAP FILTER CLOTH AND SECURELY FASTEN BOTH ENDS TO THE POST.

B. POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 30 INCHES (WHERE PHYSICALLY POSSIBLE).

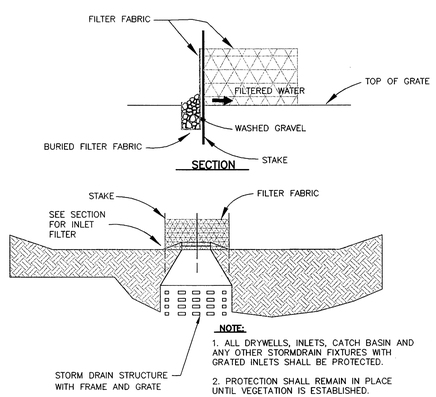
C. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 8 INCHES WIDE AND 12 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER. THE TRENCH SHALL BE CONSTRUCTED TO FOLLOW THE CONTOURS.

D. WHEN SLIT FILM FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 4 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

E. SLIT FILM FILTER FABRIC SHALL BE WIRED TO THE FENCE, AND 20 INCHES OF THE FABRIC SHALL EXTEND INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES. OTHER TYPES OF FABRIC MAY BE STAPLED TO THE FENCE.

F. WHEN EXTRA-STRENGTH OR MONOFILAMENT FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF STANDARD NOTE "E" APPLYING. EXTRA CARE SHOULD BE USED WHEN JOINING OR OVERLAPPING THESE STIFFER FABRICS.

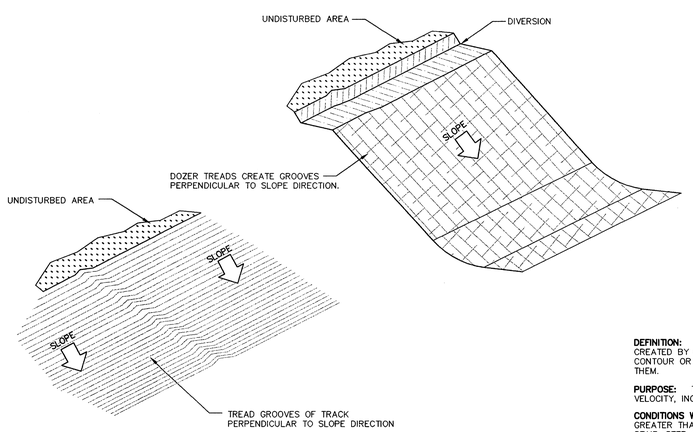
G. LOCAL GOVERNMENTS MAY SPECIFY THE USE OF PROPERLY COMPACTED NATIVE MATERIALS. IN MANY INSTANCES, THIS MAY BE THE PREFERRED ALTERNATIVE BECAUSE THE SOIL FORMS A MORE CONTINUOUS CONTACT WITH THE TRENCH BELOW.



NOTE:
1. ALL DRYWELLS, INLETS, CATCH BASIN AND ANY OTHER STORMDRAIN FIXTURES WITH GRATED INLETS SHALL BE PROTECTED.

2. PROTECTION SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED.

TEMPORARY INLET PROTECTION (IP)
NTS



DEFINITION: PROVISION OF A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS CREATED BY OPERATING A TILLER OR OTHER SUITABLE EQUIPMENT ON THE CONTOUR OR BY LEAVING SLOPES IN A ROUGHED CONDITION BY NOT FILE GRADING THEM.

PURPOSE: TO AID IN ESTABLISHMENT OF VEGETATIVE COVER, REDUCE RUNOFF VELOCITY, INCREASE INFILTRATION, AND PROVIDE FOR SEDIMENT TRAPPING.

CONDITIONS WHERE PRACTICE APPLIES: ALL SLOPES STEEPER THAN 3:1, AND GREATER THAN 5 VERTICAL FEET, REQUIRE SURFACE ROUGHENING; EITHER STAIR-STEP GRADING, GROOVING, FURROWING, OR TRACKING IF THEY ARE TO BE STABILIZED WITH VEGETATION.

SURFACE ROUGHENING (SR)
NTS

SPOKANE COUNTY ENGINEERS OFFICE
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PROJECT #: P1784
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PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
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PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

Ken Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

P-1784 Eng Road & Drainage

No.	DESC. / DATE	BY
4		
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2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: EROSION / SEDIMENT CONTROL DETAILS

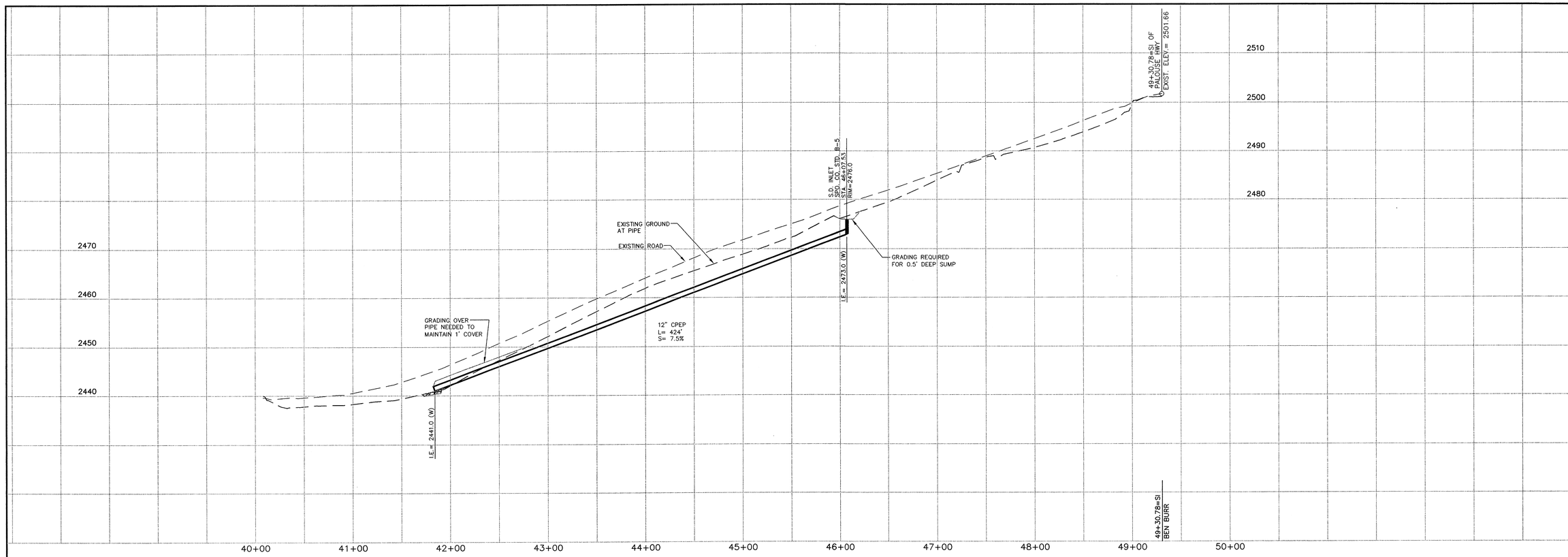
PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

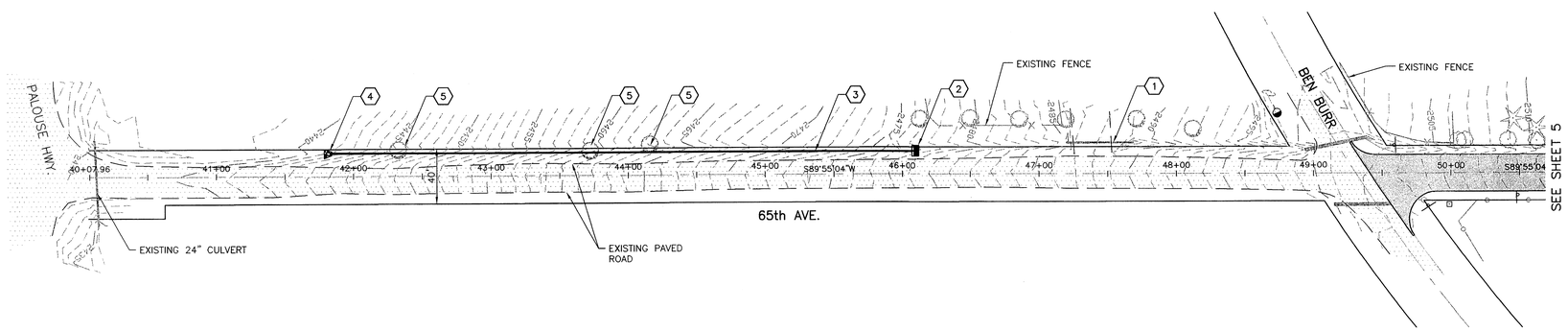
SEAL: CARSTON B. MORTENSON, STATE OF WASHINGTON, 38313, REGISTERED PROFESSIONAL ENGINEER, 5/16/06
EXPIRES 09-07-06

DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	3 OF 11
	DETAIL

05079-b.DWG EROSION DET.

P:_Projects\2005\05-079 Campbell\ Moran View\05079-b.dwg, EROSION DET., 1:1, JSC





TABLE

1. EXISTING 15" CMP. TRANSITION DITCH FLOWLINE TO MATCH PIPE INVERTS.
2. INLET TYPE 1 SPOKANE COUNTY STD. B-5 W/ TYPE 4 FRAME & GRATE. STA. 46+07.53, 17.0' LT. RIM= 2476.00 I.E. OUT= 2473.0
3. 12" CPEP L= 424' S= 7.5% MAINTAIN 1' MIN. COVER OVER PIPE
4. 12" CPEP OUTLET WITH RIPRAP ROCK STA. 41+84.27, 17.0' LT. I.E.= 2441.0
5. EXISTING TREE TO BE REMOVED.

LIMITS OF NEW ASPHALT (65th AVE.)

LIMITS OF EXISTING ASPHALT TO BE REMOVED AND REPAVED (65th AVE.)

NOTES

1. SEE CONSTRUCTION SPECIFICATIONS SHOWN ON DETAIL SHEET.
2. ALL CURB RETURNS ARE 30' RADIUS AT BACK OF CURB UNLESS OTHERWISE SHOWN.
3. ALL CURB AND OFFSET DATA IS REFERENCED TO BACK OF CURB, UNLESS OTHERWISE NOTED.
4. THE UNDERGROUND UTILITY LINES AND OFF-SITE UTILITIES LOCATION HAS BEEN EXTRACTED FROM RECORD UTILITY DRAWINGS AND FOUND SURFACE FEATURES. FIELD VERIFY EXACT LOCATIONS.
5. EXISTING OVERHEAD POWER, TELEPHONE AND OTHER UTILITIES WITHIN THE PROPOSED ROADWAYS SHALL BE RELOCATED AS NEEDED PRIOR TO CONSTRUCTION.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.
7. THE W.S.D.O.T. TYPE II INLET SHALL BE PLACED SO THAT THE LONGER SIDE OF THE STRUCTURE IS PERPENDICULAR TO THE CURB. THE SHORTER SIDE SHALL ABUT THE FACE OF THE CURB.
8. CURB INLETS HAVE BEEN DESIGNED AT 1" LOWER THAN THE THE FLOW LINE OF THE CURB. RIM ELEVATIONS GIVEN REFLECT THE 1" DEPRESSION. SEE SPOKANE COUNTY STD. B-18. ASPHALT AND CURB TO HAVE SMOOTH TAPER INTO CURB INLETS.
9. CONTRACTOR TO VERIFY SANITARY SEWER SERVICE AND WATER SERVICE ELEVATIONS AT ALL CROSSINGS PRIOR TO INSTALLATIONS.

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

SPOKANE COUNTY ENGINEERS OFFICE
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Lee Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

BENCHMARK
SPIKE IN NW FACE OF POWER POLE S. SIDE OF 65TH. AVENUE ADJACENT TO DEARBORN STREET.
ELEVATION = 2558.96, NAVD 88

05079-b.DWG 65TH

P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, 65TH, 1:1, JSC

No.	DESC. / DATE	BY
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1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

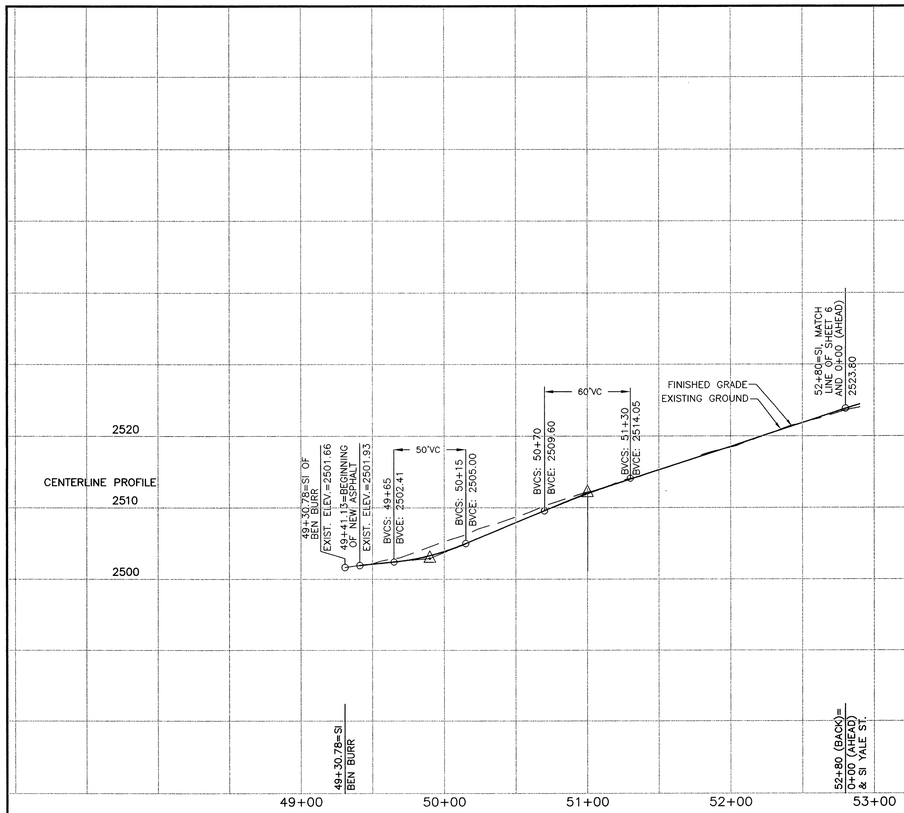
SHEET TITLE: 65TH. AVENUE STA. 40+07 TO STA. 49+30

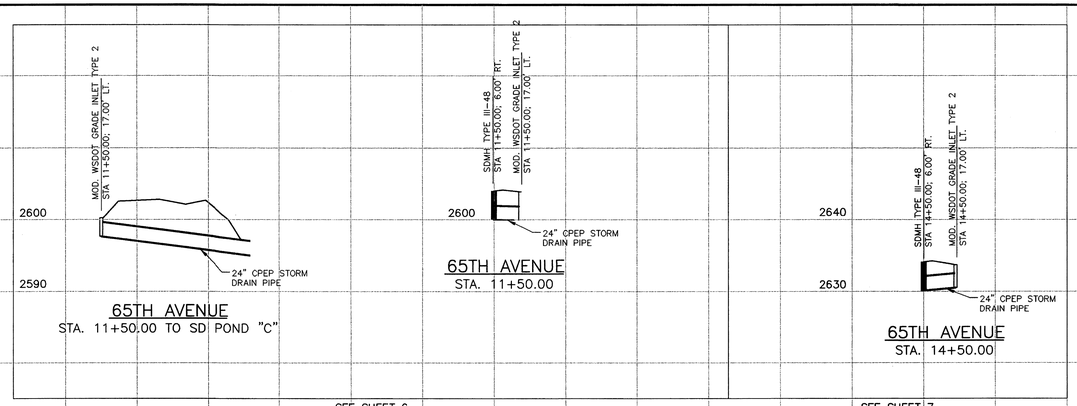
PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

SEAL: CARSTON B. MORTENSEN, STATE OF WASHINGTON, 18778, REGISTERED PROFESSIONAL ENGINEER, 5/11/06
EXPIRES 09-07-06

DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	4 OF 11
	STREET

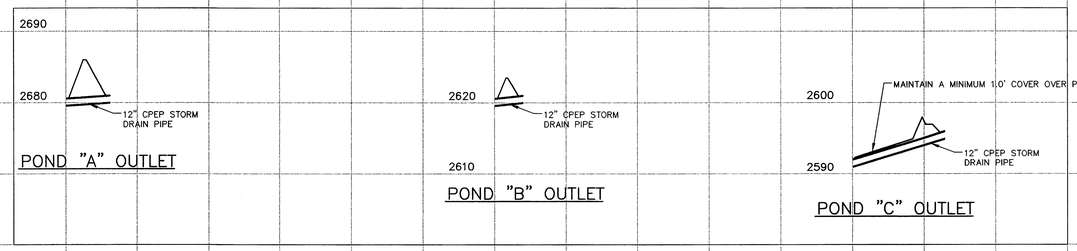
P-1784 Eng Road/Drainage



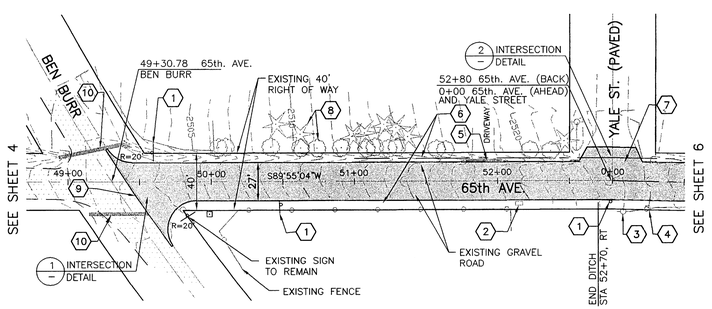


SEE SHEET 6
FOR PLAN VIEW AND ADDITIONAL INFORMATION

SEE SHEET 7
FOR PLAN VIEW AND ADDITIONAL INFORMATION



SEE SHEET 9
FOR PLAN VIEW AND ADDITIONAL INFORMATION

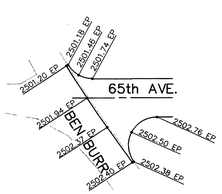


TABLE

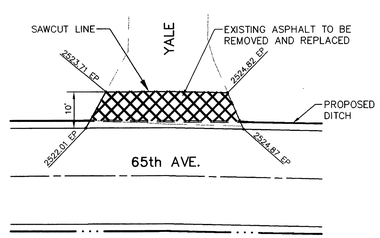
1. EXISTING SIGN TO BE RELOCATED OUTSIDE OF PROPOSED DITCH. (TYPICAL ALL LOCATIONS)
2. EXISTING MAILBOX TO BE RELOCATED OUTSIDE OF PROPOSED DITCH. (TYPICAL ALL LOCATIONS)
3. EXISTING POWER POLE.
4. EXISTING TELEPHONE RISER.
5. EXIST. 15" CMP TRANSITION DITCH FLOWLINE TO MATCH INVERTS ALIGN IN NEW DITCH.
6. EXISTING DITCH LINES. RELOCATE AS NECESSARY.
7. EXIST. 15" CMP TRANSITION DITCH FLOWLINE TO MATCH INVERTS. RELOCATE NORTH TO ALIGN IN NEW DITCH.
8. EXISTING TREES.
9. SAWCUT 82'± STRIP OF EXISTING ASPHALT. TACKCOAT NEW ASPHALT TO EXISTING & MATCH GRADE.
10. EXIST. 15" CMP. EXTEND PAST PROPOSED APPROACH AS NECESSARY.

LIMITS OF NEW ASPHALT (65th AVE.)

LIMITS OF EXISTING ASPHALT TO BE REMOVED AND REPAVED



INTERSECTION DETAIL (1)
SCALE: 1"=20'



INTERSECTION DETAIL (2)
SCALE: 1"=20'

BATUM
POINT NO. 2558.96

BENCHMARK

SPIKE IN NW FACE OF POWER POLE S. SIDE OF 65TH. AVENUE ADJACENT TO DEARBORN STREET.
ELEVATION = 2558.96, NAVD 88

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT: P1784
FIRST ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3300
NOTIFY PERMIT TECH 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

NOTES

1. SEE CONSTRUCTION SPECIFICATIONS SHOWN ON DETAIL SHEET.
2. ALL CURB RETURNS ARE 30' RADIUS AT BACK OF CURB UNLESS OTHERWISE SHOWN.
3. ALL CURB AND OFFSET DATA IS REFERENCED TO BACK OF CURB, UNLESS OTHERWISE NOTED.
4. THE UNDERGROUND UTILITY LINES AND OFF-SITE UTILITIES LOCATION HAS BEEN EXTRACTED FROM RECORD UTILITY DRAWINGS AND FOUND SURFACE FEATURES. FIELD VERIFY EXACT LOCATIONS.
5. EXISTING OVERHEAD POWER, TELEPHONE AND OTHER UTILITIES WITHIN THE PROPOSED ROADWAYS SHALL BE RELOCATED AS NEEDED PRIOR TO CONSTRUCTION.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.
7. THE W.S.D.O.T. TYPE II INLET SHALL BE PLACED SO THAT THE LONGER SIDE OF THE STRUCTURE IS PERPENDICULAR TO THE CURB. THE SHORTER SIDE SHALL ABUT THE FACE OF THE CURB.
8. CURB INLETS HAVE BEEN DESIGNED AT 1" LOWER THAN THE THE FLOW LINE OF THE CURB. RIM ELEVATIONS GIVEN REFLECT THE 1" DEPRESSION. SEE SPOKANE COUNTY STD. B-18. ASPHALT AND CURB TO HAVE SMOOTH TAPER INTO CURB INLETS.
9. CONTRACTOR TO VERIFY SANITARY SEWER SERVICE AND WATER SERVICE ELEVATIONS AT ALL CROSSINGS PRIOR TO INSTALLATIONS.

Lee Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: 65TH. AVENUE STA. 49+30 TO STA. 52+80

PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

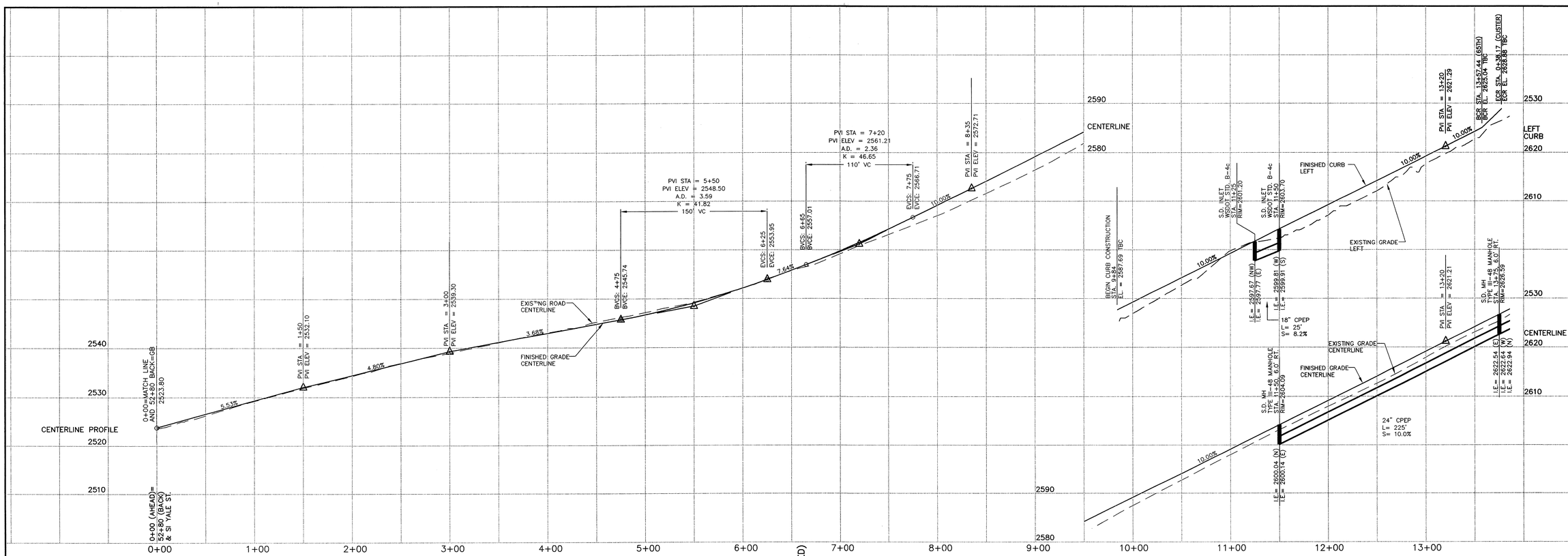
SEAL: CARSTON R. MORTENSON, STATE OF WASHINGTON, 18411, REGISTERED PROFESSIONAL ENGINEER, 5/16/06
EXPIRES 09-07-06

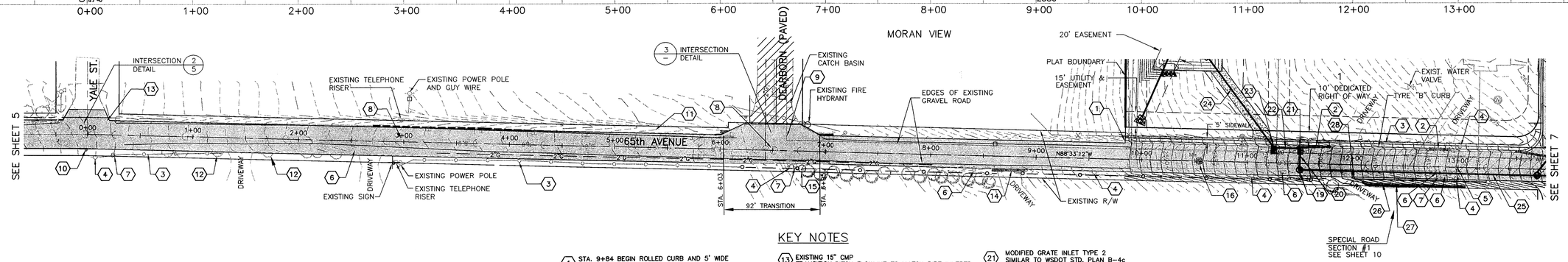
DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	5 OF 11
	STREET

P-1784 Eng Road Drainage

05079-b.DWG 65TH-1

P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, 65TH-1, 1:1, JSC





KEY NOTES

1. STA. 9+84 BEGIN ROLLED CURB AND 5' WIDE SIDEWALK CONSTRUCTION.
2. 12" CMP TO BE REMOVED.
3. EXISTING FENCE TO BE RELOCATED TO DEDICATED RIGHT OF WAY LINE. (TYPICAL ALL LOCATIONS)
4. EXISTING POWER AND/OR UTILITY POLE TO BE RELOCATED, AS NECESSARY.
5. STA. 12+99 BEGIN REMOVAL OF EXIST. ASPHALT.
6. EXISTING MAILBOX TO BE RELOCATED. (TYPICAL ALL LOCATIONS)
7. EXISTING TELEPHONE RISER TO BE RELOCATED. (TYPICAL ALL LOCATIONS)
8. ADJUST EXISTING SEWER MANHOLE RIM TO FINISHED GRADE. (TYPICAL ALL LOCATIONS)
9. ADJUST EXISTING WATER VALVE RIM TO FINISHED GRADE.
10. EXISTING SIGN TO BE RELOCATED. (TYPICAL ALL LOCATIONS)
11. EXISTING DITCH RECENTLY RECONSTRUCTED BY SPOKANE COUNTY. RELOCATE AS NECESSARY.
12. EXISTING TREE(S) TO BE REMOVED. (TYPICAL OF 7)
13. EXISTING 15" CMP TRANSITION DITCH FLOWLINE TO MATCH PIPE INVERTS.
14. EXISTING CMP
15. EXISTING WATER MANHOLE TO REMAIN IN PLACE.
16. CURB NOSE-DOWN, SEE DETAIL SHEET 10
17. NOT USED
18. NOT USED
19. TYPE III-48 MANHOLE, SPOKANE CO. STD. SHEET U-5, WITH TYPE 4 FRAME AND SOLID COVER. STA. 11+50.00, 6.00' RT. COVER EL.= 2604.09 I.E.= 2600.14 (E) I.E.= 2600.04 (N)
20. 24" CPEP L= 23' S= 1.0%
21. MODIFIED GRATE INLET TYPE 2 SIMILAR TO WSDOT STD. PLAN B-4c WITH KNOCKOUTS TO ACCOMODATE 24" CPEP AND VANED FRAME AND GRATE WSDOT STD. B-4d. STA. 11+50.00, 17.00' LT. SEE NOTE 7. GRATE EL.= 2603.70 I.E.= 2599.91 (S) I.E.= 2599.81 (W)
22. 24" CPEP L= 25' S= 8.2%
23. MODIFIED GRATE INLET TYPE 2 SIMILAR TO WSDOT STD. PLAN B-4c WITH KNOCKOUTS TO ACCOMODATE 24" CPEP AND VANED FRAME AND GRATE WSDOT STD. B-4d. STA. 11+25.00, 17.00' LT. SEE NOTE 7 GRATE EL.= 2601.20 I.E.= 2597.77 (E) I.E.= 2597.67 (NW)
24. 24" CPEP L= 105 S= 1.6% I.E.= 2596.00 (OUT)
25. 24" CPEP L= 225' S= 10.0%
26. 4' HIGH CHAIN LINK FENCE OFFSET 1' FROM RETAINING WALL.
27. REDI-ROCK RETAINING WALL DESIGNED BY CUMMINGS GEOTECHNOLOGY, INC. 0' TO 7.5' HEIGHT AND CONSTRUCTED WITHIN THE RIGHT-OF-WAY. WALL SHALL BE CONSTRUCTED IN ACCORDANCE TO: "THIRD ADDENDUM TO REPORT OF RESULTS OF LIMITED GEOTECHNICAL ENGINEERING STUDY, PROPOSED STORMWATER DISPOSAL SYSTEM, MORAN VIEW ESTATES SUBDIVISION, SPOKANE, WA" BY CUMMINGS GEOTECHNOLOGY, INC.
28. CURB NOSE-DOWN TYPICAL EACH END, SEE DETAIL SHEET 10

LIMITS OF NEW ASPHALT

LIMITS OF EXISTING ASPHALT

LIMITS OF EXISTING ASPHALT TO BE REMOVED AND REPAVED

NOTES

1. SEE CONSTRUCTION SPECIFICATIONS SHOWN ON DETAIL SHEET.
2. ALL CURB RETURNS ARE 30' RADIUS AT BACK OF CURB UNLESS OTHERWISE SHOWN.
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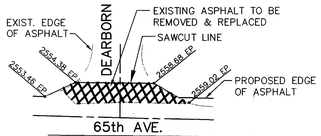
5. EXISTING OVERHEAD POWER, TELEPHONE AND OTHER UTILITIES WITHIN THE PROPOSED ROADWAYS SHALL BE RELOCATED AS NEEDED PRIOR TO CONSTRUCTION.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.
7. THE W.S.D.O.T. TYPE II INLET SHALL BE PLACED SO THAT THE LONGER SIDE OF THE STRUCTURE IS PERPENDICULAR TO THE CURB. THE SHORTER SIDE SHALL ABUT THE FACE OF THE CURB.
8. CURB INLETS HAVE BEEN DESIGNED AT 1" LOWER THAN THE THE FLOW LINE OF THE CURB. RIM ELEVATIONS GIVEN REFLECT THE 1" DEPRESSION. SEE SPOKANE COUNTY STD. B-18. ASPHALT AND CURB TO HAVE SMOOTH TAPER INTO CURB INLETS.
9. CONTRACTOR TO VERIFY SANITARY SEWER SERVICE AND WATER SERVICE ELEVATIONS AT ALL CROSSINGS PRIOR TO INSTALLATIONS.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/08
PROJECT LANE MILES PUBLIC: 0.20
PROJECT LANE MILES PRIVATE:
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3208
NOTIFY PLANNING ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION!



INTERSECTION DETAIL 3/- 1"=50'

BENCHMARK

SPIKE IN NW FACE OF POWER POLE S. SIDE OF 65TH. AVENUE ADJACENT TO DEARBORN STREET.
ELEVATION = 2558.96, NAVD 88

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

Lee Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: 65TH. AVENUE STA. 0+00 TO STA. 13+80

PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

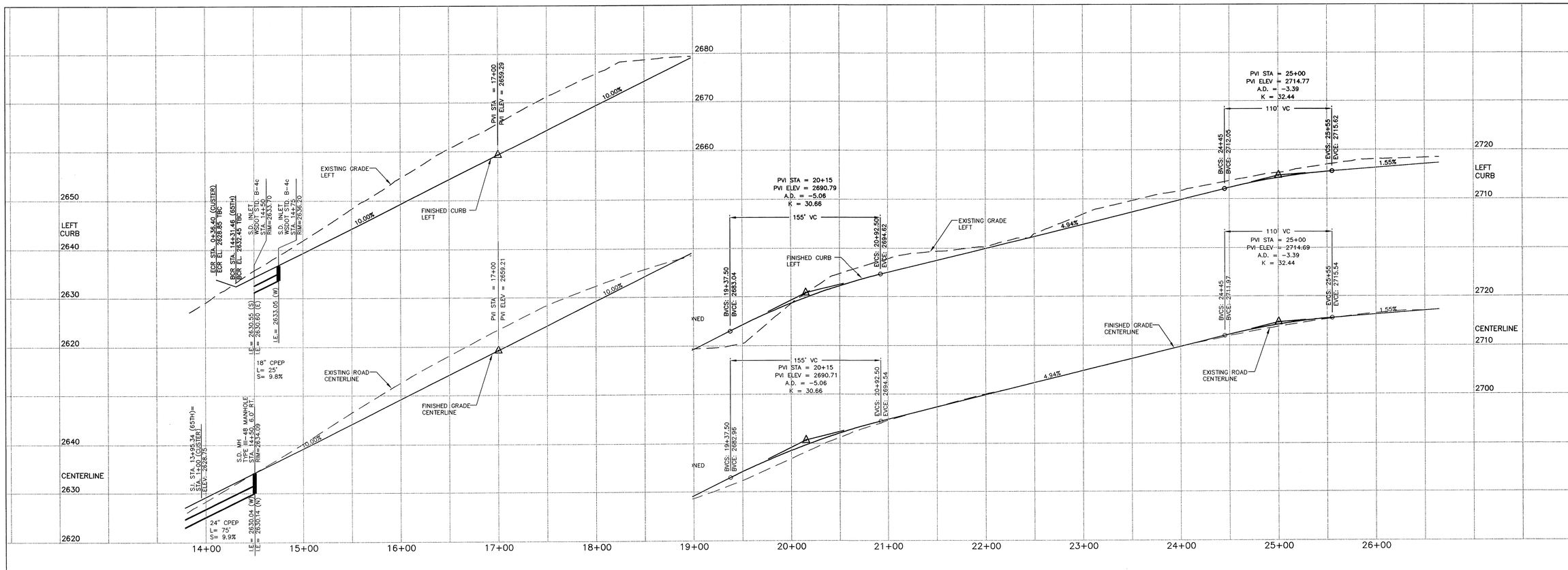
SEAL: CARSTON B. MORT, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 5/16/06
EXPIRES 09-07-06

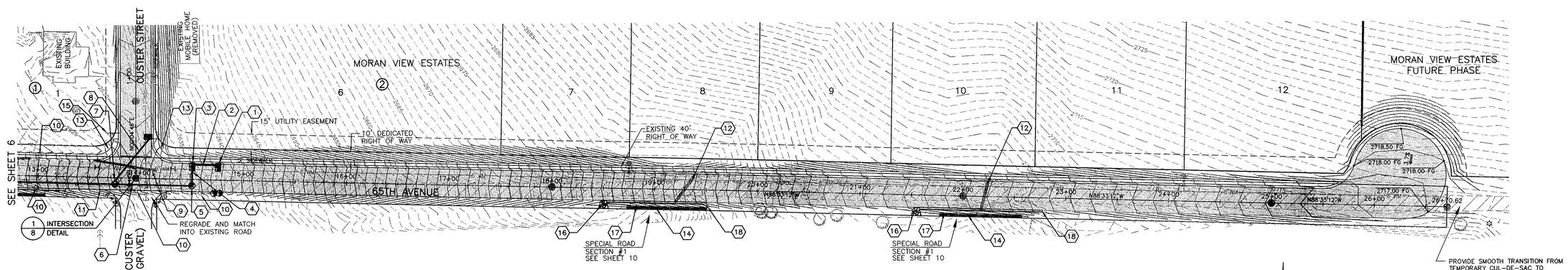
DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	6 OF 11
	STREET

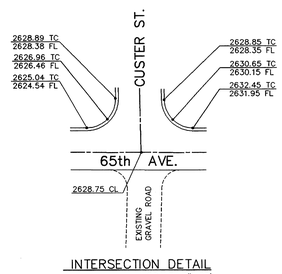
P-1784 Eng Road-Drainage

P:_Projects\2005\05-079 Campbell\ Moran View\05079-h.dwg, 65TH-2, 1:1, JSC

05079-h.DWG 65TH-2







INTERSECTION DETAIL
SCALE: 1"=20'

BENCHMARK

SPIKE IN NW FACE OF POWER POLE S. SIDE OF 65TH. AVENUE ADJACENT TO DEARBORN STREET.
ELEVATION = 2558.96, NAVD 88

TABLE

1. MODIFIED GRATE INLET TYPE 2 SIMILAR TO WSDOT STD. PLAN B-4c WITH KNOCKOUTS TO ACCOMODATE 24" CPEP AND VANED FRAME AND GRATE WSDOT STD. B-4d. STA. 14+75.00, 17.00' LT. SEE NOTE 7. GRATE EL.= 2636.20 I.E.= 2633.05 (W)
2. 18" CPEP L= 25' S= 9.8%
3. MODIFIED GRATE INLET TYPE 2 SIMILAR TO WSDOT STD. PLAN B-4c WITH KNOCKOUTS TO ACCOMODATE 24" CPEP AND VANED FRAME AND GRATE WSDOT STD. B-4d. STA. 14+50.00, 14.08' LT. SEE NOTE 7. GRATE EL.= 2633.70 I.E.= 2630.60 (E) I.E.= 2630.55 (S)
4. 24" CPEP L= 20' S= 1.8%
5. TYPE III-48 MANHOLE, SPOKANE CO. STD. SHEET U-5, WITH TYPE 4 FRAME AND SOLID COVER. STA. 14+50.00, 6.00' RT. COVER EL.= 2634.09 I.E.= 2630.14 (N) I.E.= 2630.04 (W)
6. 24" CPEP L= 75' S= 9.9%
7. TYPE III-48 MANHOLE, SPOKANE CO. STD. SHEET U-5, WITH TYPE 4 FRAME AND SOLID COVER. STA. 13+75.00, 6.00' RT. COVER EL.= 2626.59 I.E.= 2622.64 (E) I.E.= 2622.94 (N) I.E.= 2622.54 (W)
8. 12" CPEP L= 54' S= 5.8%
9. 12" CMP TO BE REMOVED.
10. EXISTING POWER AND/OR UTILITY POLE TO BE RELOCATED. (TYPICAL ALL LOCATIONS)
11. PROPOSED EDGE OF PAVEMENT.
12. EXISTING 12" CMP TO BE REMOVED.
13. CURB RAMP SPOKANE COUNTY STANDARD SHEET A-5. CURB RAMP SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).
14. REDI-ROCK RETAINING WALL DESIGNED BY CUMMINGS GEOTECHNOLOGY, INC. WEST WALL HAS HEIGHT OF 0' TO 7.5' AND EAST WALL HAS HEIGHT OF 0' TO 6'. WALLS SHALL BE CONSTRUCTED WITHIN THE RIGHT-OF-WAY. WALL SHALL BE CONSTRUCTED IN ACCORDANCE TO: "THIRD ADDENDUM TO REPORT OF RESULTS OF LIMITED GEOTECHNICAL ENGINEERING STUDY, PROPOSED STORMWATER DISPOSAL SYSTEM, MORAN VIEW ESTATES SUBDIVISION, SPOKANE, WA" BY CUMMINGS GEOTECHNOLOGY, INC.
15. STOP AND STREET SIGNS PER MUTCD AND SPOKANE COUNTY STANDARDS.
16. ROCK ARMOR SIMILAR TO RIPRAP. SEE DETAIL SHEET. EXTEND TO RIGHT OF WAY. L= 5.0' AT CURB L= 10.0' AT RIGHT OF WAY
17. 4' HIGH CHAIN LINK FENCE OFFSET 1' FROM RETAINING WALL.
18. CURB NOSE-DOWN TYPICAL EACH END, SEE DETAIL SHEET 10

LIMITS OF EXISTING PAVEMENT

LIMITS OF NEW ASPHALT & SIDEWALK

NOTES

1. SEE CONSTRUCTION SPECIFICATIONS SHOWN ON DETAIL SHEET.
2. ALL CURB RETURNS ARE 30' RADIUS AT BACK OF CURB UNLESS OTHERWISE SHOWN.
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9. CONTRACTOR TO VERIFY SANITARY SEWER SERVICE AND WATER SERVICE ELEVATIONS AT ALL CROSSINGS PRIOR TO INSTALLATIONS.

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE:
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3699
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

Lee Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

P-1784 Eng Road Drainage

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: 65TH. AVENUE STA. 13+80 TO STA. 26+70.64

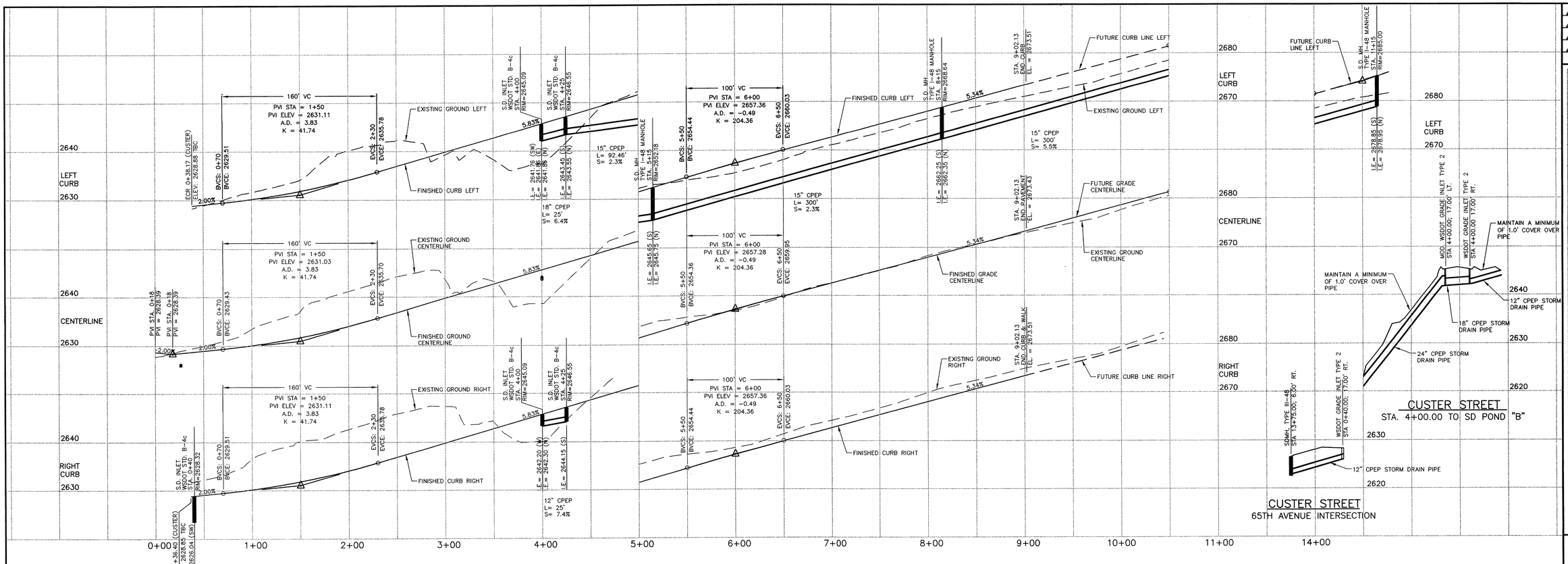
PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

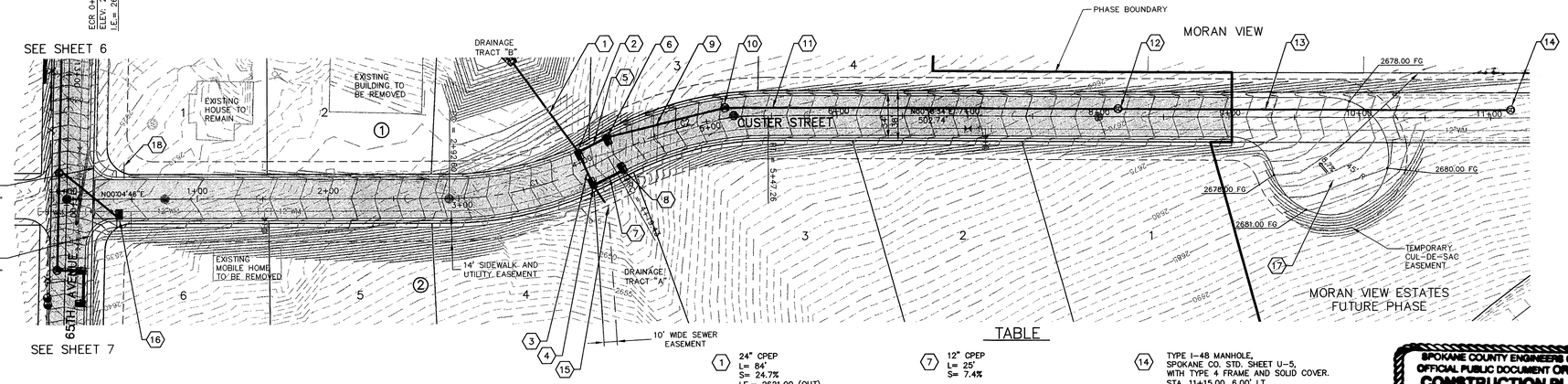
SEAL: CARLTON B. MORTENSEN, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 5/11/06
EXPIRES 09-07-06

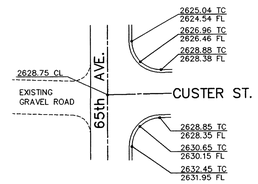
DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	7 OF 11
	STREET

05079-bDWG 65TH-3

P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, 65TH-3, 1:1, JSC







INTERSECTION DETAIL
SCALE: 1"=20'

BENCHMARK

SPIKE IN NW FACE OF POWER POLE S. SIDE OF 65TH. AVENUE ADJACENT TO DEARBORN STREET.
ELEVATION = 2558.96, NAVD 88

TABLE

1. 24" CPEP
   L= 84'
   S= 24.7%
   I.E.= 2621.00 (OUT)
2. MODIFIED GRATE INLET TYPE 2
   SIMILAR TO WSDOT STD. PLAN B-4c
   WITH KNOCKOUTS TO ACCOMODATE 24" CPEP AND VANED FRAME AND GRATE WSDOT STD. B-4d.
   STA. 4+00.00, 17.00' LT. SEE NOTE 7.
   GRATE EL.= 2645.09
   I.E.= 2641.86 (N)
   I.E.= 2641.86 (E)
   I.E.= 2641.76 (SW)
3. 18" CPEP
   L= 34'
   S= 1.0%
4. GRATE INLET TYPE 2
   WSDOT STD. PLAN B-4c W/ FRAME AND VANED GRATE WSDOT STD. B-4d.
   STA. 4+00.00, 17.00' RT. SEE NOTE 7.
   GRATE EL.= 2645.09
   I.E.= 2642.20 (W)
   I.E.= 2642.30 (N,E)
5. 18" CPEP
   L= 25'
   S= 6.4%
6. GRATE INLET TYPE 2
   WSDOT STD. PLAN B-4c W/ FRAME AND VANED GRATE WSDOT STD. B-4d.
   STA. 4+25.00, 17.00' LT. SEE NOTE 7.
   GRATE EL.= 2646.55
   I.E.= 2643.55 (N)
   I.E.= 2643.45 (S)
7. 12" CPEP
   L= 25'
   S= 7.4%
8. GRATE INLET TYPE 2
   WSDOT STD. PLAN B-4c W/ FRAME AND VANED GRATE WSDOT STD. B-4d.
   STA. 4+25.00, 17.00' RT. SEE NOTE 7.
   GRATE EL.= 2646.55
   I.E.= 2644.15 (S)
9. 15" CPEP
   L= 92.46'
   S= 2.3%
10. TYPE I-48 MANHOLE,
    SPOKANE CO. STD. SHEET U-5,
    WITH TYPE 4 FRAME AND SOLID COVER.
    STA. 5+15.00, 9.00' LT.
    COVER EL.= 2652.18
    I.E.= 2645.75 (N)
    I.E.= 2645.65 (S)
11. 15" CPEP
    L= 300'
    S= 5.5%
12. TYPE I-48 MANHOLE,
    SPOKANE CO. STD. SHEET U-5,
    WITH TYPE 4 FRAME AND SOLID COVER.
    STA. 8+15.00, 6.00' LT.
    COVER EL.= 2668.64
    I.E.= 2662.35 (N)
    I.E.= 2662.25 (S)
13. 15" CPEP
    L= 300'
    S= 5.5%
14. TYPE I-48 MANHOLE,
    SPOKANE CO. STD. SHEET U-5,
    WITH TYPE 4 FRAME AND SOLID COVER.
    STA. 11+15.00, 6.00' LT.
    COVER EL.= 2685.00
    I.E.= 2678.95 (N)
    I.E.= 2678.85 (S)
15. 12" CPEP
    L= 30'
    S= 5.7%
    I.E.= 2644.00 (IN)
16. GRATE INLET TYPE 2
    WSDOT STD. PLAN B-4c W/ FRAME AND VANED GRATE WSDOT STD. B-4d.
    STA. 0+40.00, 17.00' RT. SEE NOTE 7.
    GRATE EL.= 2628.32
    I.E.= 2626.04 (SW)
17. TEMPORARY CUL-DE-SAC
    6" CRUSHED ROCK TOP COURSE
    3/4" MINUS COMPACTED TO 95%
    MAX. DENSITY (ASTM D698).
18. STOP AND STREET SIGNS
    PER M.U.T.C.D. STANDARDS.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, YAS-BUILTS* ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
HORZ: 1 inch = 50 ft.
VERT: 1 inch = 10 ft.

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C1	126.83	250.00	29°04'02"	64.81
C2	127.83	250.00	29°17'49"	65.35

NOTES

1. SEE CONSTRUCTION SPECIFICATIONS SHOWN ON DETAIL SHEET.
2. ALL CURB RETURNS ARE 30' RADIUS AT BACK OF CURB UNLESS OTHERWISE SHOWN.
3. ALL CURB AND OFFSET DATA IS REFERENCED TO BACK OF CURB, UNLESS OTHERWISE NOTED.
4. THE UNDERGROUND UTILITY LINES AND OFF-SITE UTILITIES LOCATION HAS BEEN EXTRACTED FROM RECORD UTILITY DRAWINGS AND FOUND SURFACE FEATURES. FIELD VERIFY EXACT LOCATIONS.
5. EXISTING OVERHEAD POWER, TELEPHONE AND OTHER UTILITIES WITHIN THE PROPOSED ROADWAYS SHALL BE RELOCATED AS NEEDED PRIOR TO CONSTRUCTION.
6. 1.0' (MIN.) OF COVER SHALL BE MAINTAINED OVER ALL STORM DRAIN PIPES.
7. THE W.S.D.O.T. TYPE II INLET SHALL BE PLACED SO THAT THE LONGER SIDE OF THE STRUCTURE IS PERPENDICULAR TO THE CURB. THE SHORTER SIDE SHALL ABUT THE FACE OF THE CURB.
8. CURB INLETS HAVE BEEN DESIGNED AT 1" LOWER THAN THE THE FLOW LINE OF THE CURB. RIM ELEVATIONS GIVEN REFLECT THE 1" DEPRESSION. SEE SPOKANE COUNTY STD. B-18. ASPHALT AND CURB TO HAVE SMOOTH TAPER INTO CURB INLETS.
9. CONTRACTOR TO VERIFY SANITARY SEWER SERVICE AND WATER SERVICE ELEVATIONS AT ALL CROSSINGS PRIOR TO INSTALLATIONS.

Lee Cuplell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

P-1784 Eng Land Drainage

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: CUSTER STREET STA. 0+00 TO STA. 11+15

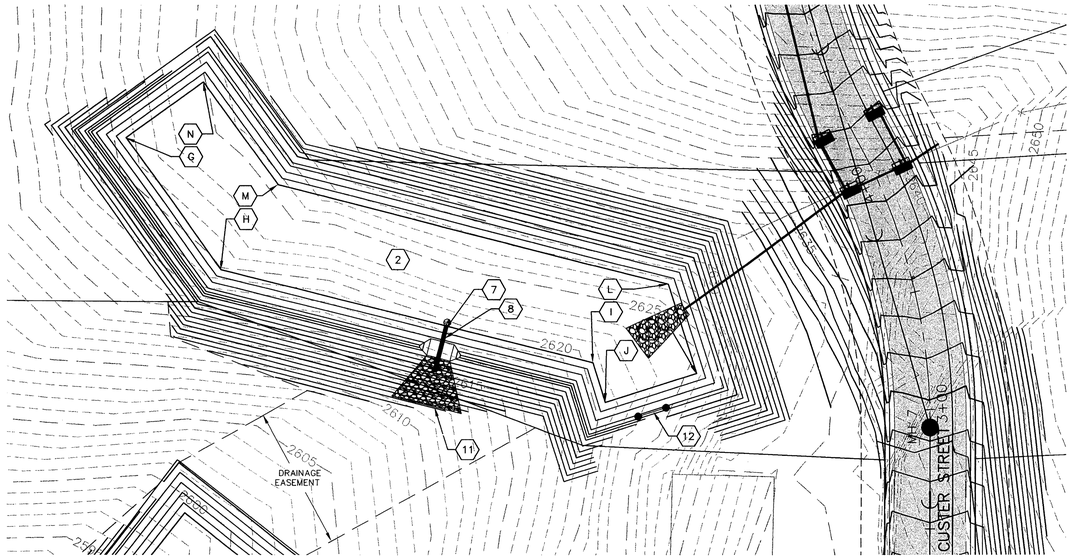
PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

SEAL: CASSION B. MORTESON, STATE OF WASHINGTON, 38388, PROFESSIONAL ENGINEER, 5/16/06
EXPIRES 09-07-06

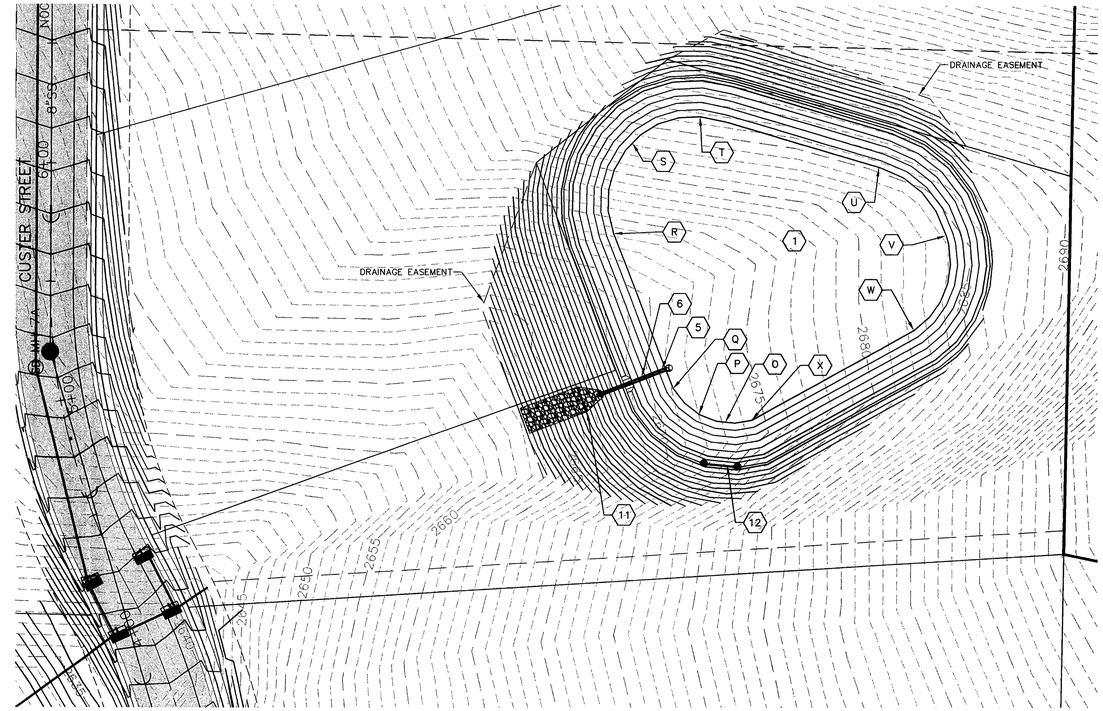
DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CJH
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	8 OF 11
	STREET

05079-b.DWG CUSTER

F:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, CUSTER, 11, JSC



POND "B"
1" = 30'



POND "A"
1" = 30'

TABLE

1. DETENTION POND "A"
   BOTTOM ELEV.= 2680.00
   BOTTOM AREA= 12,570 S.F.
   HEIGHT TO BERM= 5.5'
   MAX.WATER SURFACE EL. 2680.84 (50 YEAR, PHASE 1)
   FOR SEEDING SPECIFICATIONS SEE DETAIL SHEET 10
2. DETENTION POND "B"
   BOTTOM ELEV.= 2620.00
   BOTTOM AREA= 10,160 S.F.
   HEIGHT TO BERM= 3.5'
   MAX.WATER SURFACE EL. 2621.24 (50 YEAR, PHASE 1)
   FOR SEEDING SPECIFICATIONS SEE DETAIL SHEET 10
3. DETENTION POND "C"
   BOTTOM ELEV.= 2595.00
   BOTTOM AREA= 5,390 S.F.
   HEIGHT TO BERM= 4.0'
   MAX.WATER SURFACE EL. 2597.95 (50 YEAR, PHASE 1)
   FOR SEEDING SPECIFICATIONS SEE DETAIL SHEET 10
4. NOT USED
5. INSTALL END CAP ON INLET OF 12" CPEP STORM DRAIN PIPE. PROVIDE 4" DIAMETER OPENING (ORIFICE) ON END CAP.
   I.E.= 2680.00 (ORIFICE)
   CONSTRUCT 3' DIAMETER AND 1' DEEP SUMP AT INLET. FILL SUMP WITH ROCK OF SIMILAR SIZE TO RIP RAP PADS.
6. 12' CPEP
   L= 27'
   S= 1.5%
   I.E.= 2680.00 (IN)
   I.E.= 2679.60 (OUT)
7. INSTALL END CAP ON INLET OF 12" CPEP STORM DRAIN PIPE. PROVIDE 4" DIAMETER OPENING (ORIFICE) ON END CAP.
   I.E.= 2620.00 (ORIFICE)
   CONSTRUCT 3' DIAMETER AND 1' DEEP SUMP AT INLET. FILL SUMP WITH ROCK OF SIMILAR SIZE TO RIP RAP PADS.
8. 12' CPEP
   L= 17'
   S= 2.4%
   I.E.= 2620.00 (IN)
   I.E.= 2619.60 (OUT)
9. INSTALL END CAP ON INLET OF 12" CPEP STORM DRAIN PIPE. PROVIDE 4" DIAMETER OPENING (ORIFICE) ON END CAP.
   I.E.= 2595.00 (ORIFICE)
   CONSTRUCT 3' DIAMETER AND 1' DEEP SUMP AT INLET. FILL SUMP WITH ROCK OF SIMILAR SIZE TO RIP RAP PADS.
10. 12' CPEP
    L= 64'
    S= 5.3%
    I.E.= 2595.00 (IN)
    I.E.= 2591.00 (OUT)
11. RIP RAP. SEE DETAIL THIS SHEET.
12. DOUBLE SWING GATE. SEE DETAIL THIS SHEET.

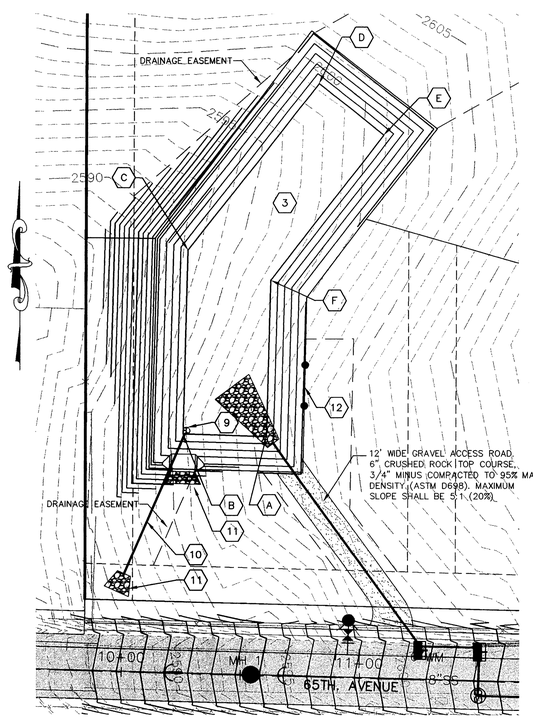
COORDINATE TABLE

A	N 2441.28 E 4716.26	N	N 2769.98 E 4746.23
B	N 2442.30 E 4681.28	O	N 2813.40 E 5271.21
C	N 2519.42 E 4683.53	P	N 2816.65 E 5260.13
D	N 2589.21 E 4738.53	Q	N 2827.56 E 5249.28
E	N 2567.77 E 4765.53	R	N 2892.38 E 5224.27
F	N 2506.81 E 4718.18	S	N 2930.59 E 5232.19
G	N 2746.56 E 4713.80	T	N 2941.48 E 5260.50
H	N 2691.46 E 4753.60	U	N 2920.37 E 5335.49
I	N 2652.06 E 4909.55	V	N 2891.59 E 5363.52
J	N 2635.59 E 4914.74	W	N 2852.10 E 5350.15
K	N 2647.60 E 4952.89	X	N 2814.25 E 5282.21
L	N 2685.37 E 4941.00		
M	N 2726.68 E 4777.50		

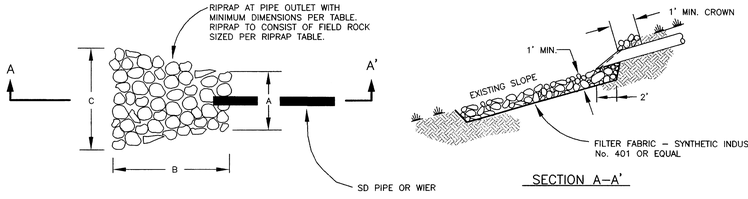
RIP RAP TABLE

LOCATION	A	B	C	MIN.	AVG.	MAX.	THICKNESS	NOTES
POND "A" OUT	3.0'	8.2'	11.2'	1.5"	6.0"	8.3"	12.0"	EXTEND 11.2' WIDTH TO BOTTOM OF BERM
POND "B" IN	6.0'	24.7'	15.9'	1.5"	6.0"	8.3"	12.0"	
POND "B" WEIR/PIPE	10.0'	20.0'	30.0'	1.5"	6.0"	8.3"	12.0"	
POND "C" IN	6.0'	29.1'	17.7'	1.5"	6.0"	8.3"	12.0"	
POND "C" OUT	3.0'	8.2'	11.2'	1.5"	6.0"	8.3"	12.0"	
POND "C" WEIR	10.0'	5.0'	15.0'	1.5"	6.0"	8.3"	12.0"	

LOCATION	A	B	C	D	E	F
TRACT-A POND	4.0'	1.5'	4.0'	5.5'	2680.00	2685.50
TRACT-B POND	10.0'	3.75'	2.25'	3.5'	2620.00	2623.50
TRACT-C POND	10.0'	3.75'	2.90'	4.0'	2595.00	2599.00

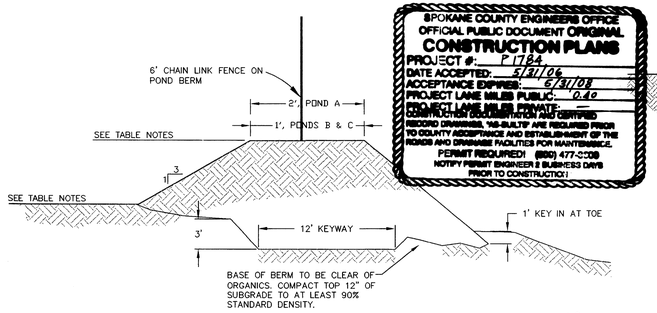


POND "C"
1" = 30'



PIPE OUTLET / RIPRAP DETAIL
NTS

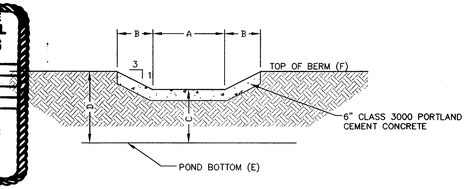
SECTION A–A'



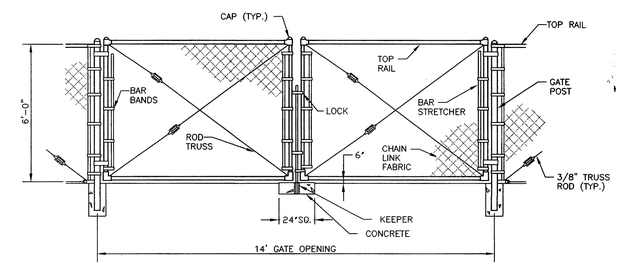
POND BERM SECTION
NTS

NOTES:
1. BOTTOM OF POND AND NON-BERM AREAS OF POND SHALL BE PLANTED WITH NATIVE-TYPE GRASSES ACCLIMATED TO ARID CONDITIONS.
2. THE BASE OF THE BERM SHALL BE FIRM, UNYIELDING SUBGRADE, FREE OF ORGANICS AND FILL MATERIAL.
3. STANDARD DENSITY SHALL BE IN ACCORDANCE WITH ASTM D-1557.
4. POND BERM HEIGHTS GREATER THAN 12' SHALL COMPLY WITH THE GEOTECHNICAL REPORT: "ADDENDUM TO REPORT OF RESULTS OF LIMITED GEOTECHNICAL ENGINEERING STUDY, PROPOSED STORMWATER DISPOSAL SYSTEM, MORAN VIEW ESTATES SUBDIVISION, SPOKANE, WA." BY CUMMINGS GEOTECHINCAL, INC. DATED JANUARY 27, 2006.
5. THE DETENTION POND BERM SHALL BE CONSTRUCTED UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER AND MEET THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
6. THE POND BERM SHALL BE CONSTRUCTED OF NATIVE MATERIAL OR SIMILAR GRANULAR SOIL. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT AS DETERMINED BY THE MODIFIED PROCTOR METHOD AND INSTALLED AT A MAXIMUM OF 6" LIFTS.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 6/31/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3008
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION!



OVERFLOW WEIR SECTION
NTS



NOTES:
1. SEE W.S.D.O.T. STANDARD PLAN L-2 FOR MEMBER SIZE.
2. GATES SHALL HAVE 6" CLEARANCE ABOVE PAVEMENT OR GROUND.
3. CHAIN LINK FENCE TO BE CONSTRUCTED PER W.S.D.O.T. SPECIFICATIONS TYPE 3.

DOUBLE SWING GATE
NTS

Lee Campbell 5/16/06

CALL BEFORE YOU DIG 456-8000

P-1784 England Drainage

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: DRAINAGE PONDS

PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

SEAL: CARLTON B. MORRENSON, STATE OF WASHINGTON, 18411, REGISTERED PROFESSIONAL ENGINEER, 5/16/06
EXPIRES 09-07-06

DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	9 OF 11
	STREET

05079-DLDWG POND-1

P:_Projects\2005\05-079 Campbell Moran View\05079-dwg_POND-1.1.1.dwg

1) All work and materials shall be in conformance with the "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION" 1999, and as amended.

2) Locations of existing utilities shown in the plans are approximate. Prior to site construction, the Contractor shall be responsible for locating all underground and overhead utilities. Any conflicting utilities shall be relocated prior to construction of road and drainage facilities. Call the underground utility location service at 456–8000 before you dig.

3) The Contractor is required to have a complete set of the approved road and drainage plans on the job site whenever construction is in progress

4) If the Contractor discovers any discrepancies between the plans and existing conditions encountered, the Contractor shall immediately notify the Design Engineer.

5) For construction of drywells, install filter fabric (Amoco 4545 or approved equivalent) between the washed drain rock and the native soils.

6) For any curb grades less than 0.8% (0.008 ft/ft), a Washington State licensed Professional Land Surveyor shall verify that the curb forms are at the grades noted on the approved plans, prior to placement of curb material. The Contractor is responsible for arranging and coordinating work with the Professional Land Surveyor.

7) The Contractor shall employ a licensed surveyor to verify that the cross gutter forms are at the correct plane grade prior to concrete placement. The cross gutters shall be constructed prior to paving, and the pavement shall then match the edge of concrete gutter.

8) The contractor shall review all geotechnical recommendations and investigation reports associated with the subject development prior to starting construction. Any discrepancies between design plans and geotechnical report shall be reported to the Design Engineer. Construction shall comply with recommendations of the geotechnical reports.

9) The contractor shall demolish and remove existing structures and associated improvements on the subject site prior to starting construction. Contractor shall coordinate demolition activities with owner for further direction and extent of work.

10) The floor of a Grassed Percolation Area (GPA) swale includes the level portion of the floor of the swale, and the sideslopes of the swale up to the GPA overflow elevation or top of drywell. The soil located in the floor of the GPA swale shall be a medium to well–draining material, with a minimum infiltration rate of 0.5 inches per hour. The Engineer shall provide a written statement which verifies that all GPA swales conform to this requirement. This written statement shall be submitted to the Spokane County Engineer's Office prior to installing finished landscaping/sod and prior to final acceptance. The swale floor material shall be installed to a native soil stratum which also meets or exceeds this minimum percolation rate of 0.5 inches per hour.

11) Irrigation system for storm water management ponds shall be provided by Contractor/Developer. Irrigation system shall be design/build.

CONSTRUCTION SPECIFICATIONS

Provide fresh, clean new crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide seed mixture composed of grass species and percentages as follows:

20 percent Elka Perennial Rye

20 percent Durar Hard Fescue

45 percent Covar Sheep /Fescue

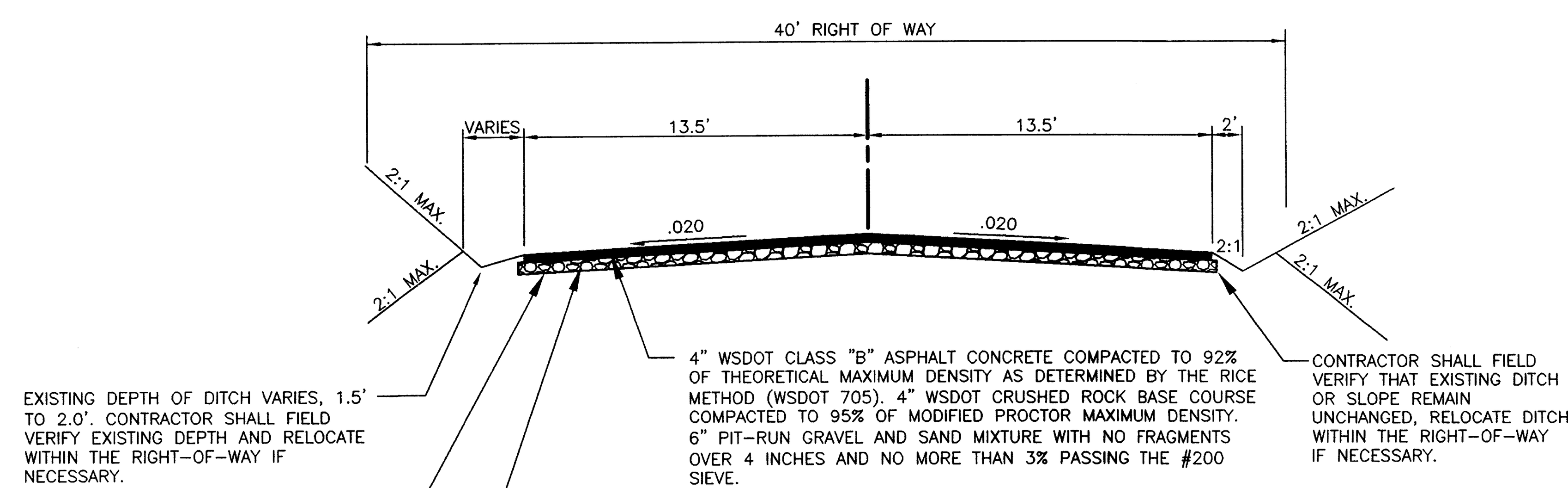
15 percent reubens Canadian Bluegrass

Provide mixture composed of grass seed and fertilizer in percentages as follows:

Grass seed mixture: 90 lbs. per acre
Fertilizer: 16:16:16 timed release composition, 300 lbs. per acre

All seeding of slopes shall be done in accordance with WSDOT Standard Specifications.

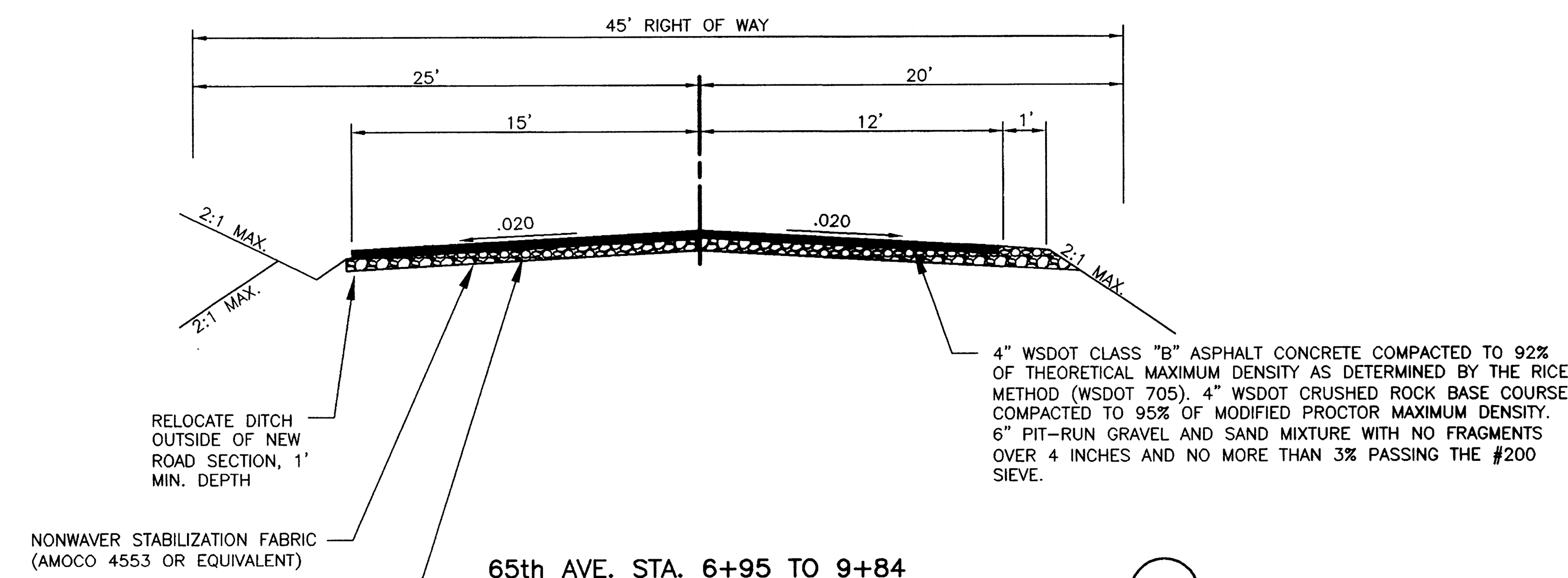
SEEDING SPECIFICATIONS



65th AVE. STA. 49+30.78 TO 52+80 (BACK)
STA. 0+00 TO 6+03 (AHEAD)

NTS

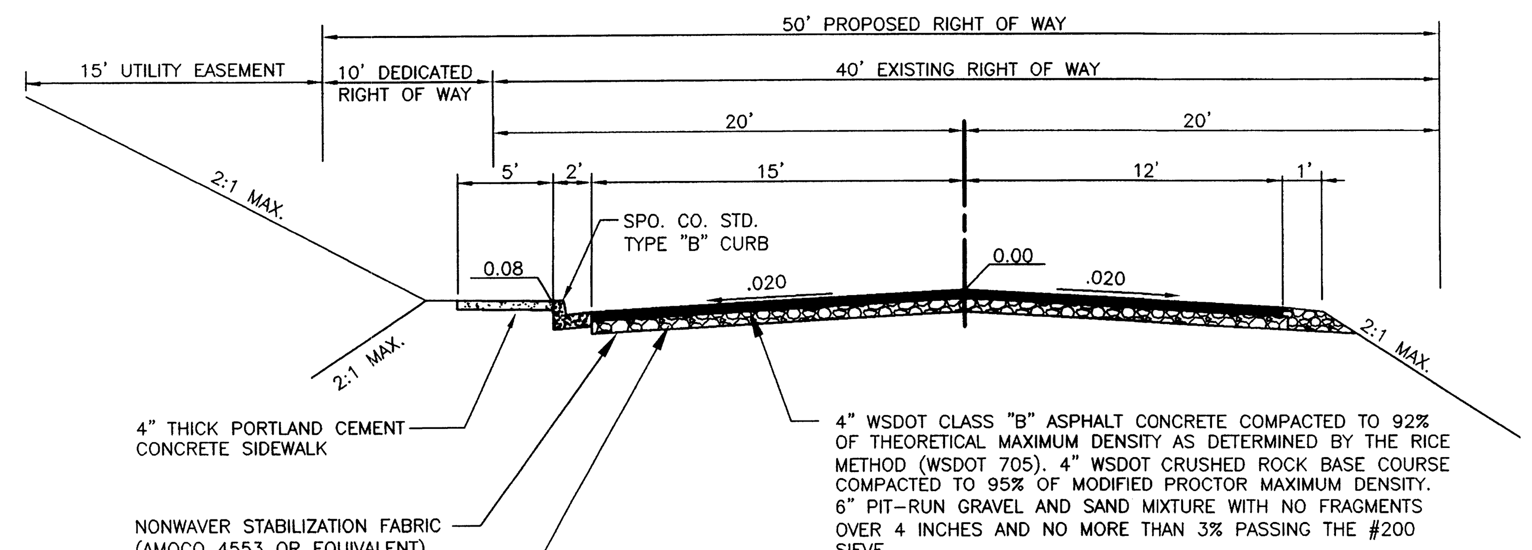
TOP 12" OF SUBGRADE SHALL BE MOISTURE CONDITIONED TO WITHIN 1% TO 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (AASHTO T–180). ANY STRUCTURAL FILL MAKING UP THE SUBGRADE WITHIN 24" OF THE ASPHALT PAVEMENT SHALL ALSO BE COMPACTED TO 95% OF MAXIMUM DENSITY.



65th AVE. STA. 6+95 TO 9+84

NTS

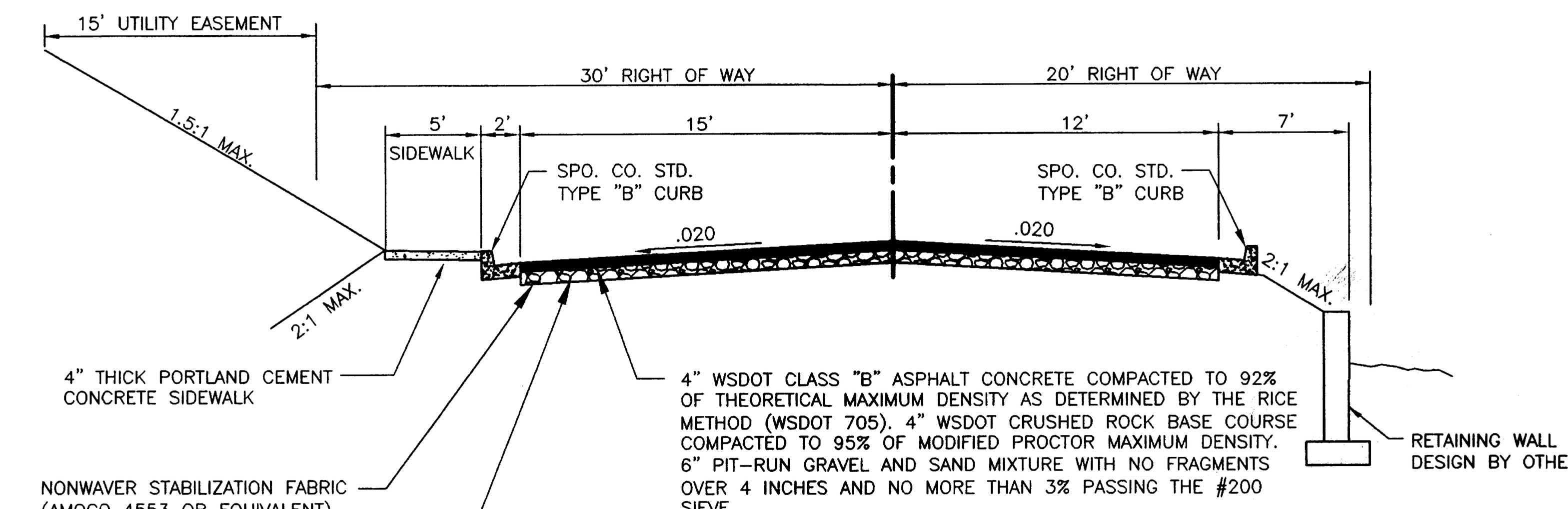
TOP 12" OF SUBGRADE SHALL BE MOISTURE CONDITIONED TO WITHIN 1% TO 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (AASHTO T–180). ANY STRUCTURAL FILL MAKING UP THE SUBGRADE WITHIN 24" OF THE ASPHALT PAVEMENT SHALL ALSO BE COMPACTED TO 95% OF MAXIMUM DENSITY.



65th AVE. STA. 9+84 TO 25+50

NTS

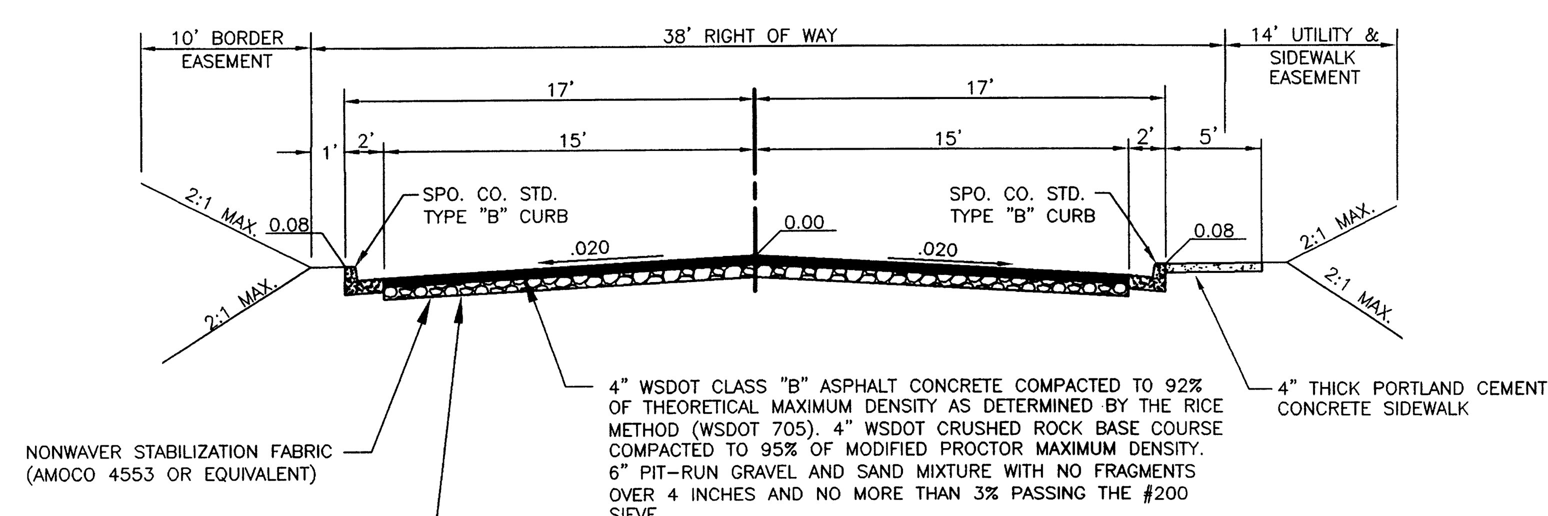
TOP 12" OF SUBGRADE SHALL BE MOISTURE CONDITIONED TO WITHIN 1% TO 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (AASHTO T–180). ANY STRUCTURAL FILL MAKING UP THE SUBGRADE WITHIN 24" OF THE ASPHALT PAVEMENT SHALL ALSO BE COMPACTED TO 95% OF MAXIMUM DENSITY.



SPECIAL ROAD SECTION #1
65th AVE. STA. 12+02 TO 13+27
STA. 18+53 TO 19+53
STA. 21+58 TO 22+78

NTS

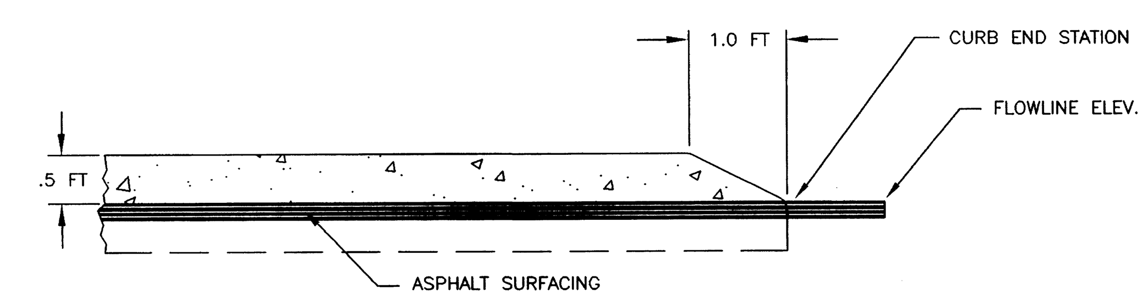
TOP 12" OF SUBGRADE SHALL BE MOISTURE CONDITIONED TO WITHIN 1% TO 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (AASHTO T–180). ANY STRUCTURAL FILL MAKING UP THE SUBGRADE WITHIN 24" OF THE ASPHALT PAVEMENT SHALL ALSO BE COMPACTED TO 95% OF MAXIMUM DENSITY.



CUSTER STREET STA. 0+00 TO 9+02.13

NTS

TOP 12" OF SUBGRADE SHALL BE MOISTURE CONDITIONED TO WITHIN 1% TO 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (AASHTO T–180). ANY STRUCTURAL FILL MAKING UP THE SUBGRADE WITHIN 24" OF THE ASPHALT PAVEMENT SHALL ALSO BE COMPACTED TO 95% OF MAXIMUM DENSITY.



CURB NOSEDOWN DETAIL

NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/06
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

Lee Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456–8000

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE. SPOKANE, WA 99202
PHONE 509–242–1000 FAX 509–242–1001

SHEET TITLE: DETAIL SHEET

PROJECT TITLE: MORAN VIEW ESTATES SPOKANE COUNTY, WA

SEAL: CARSTON B. MORTENSON, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 5/16/06, EXPIRES 09-07-06

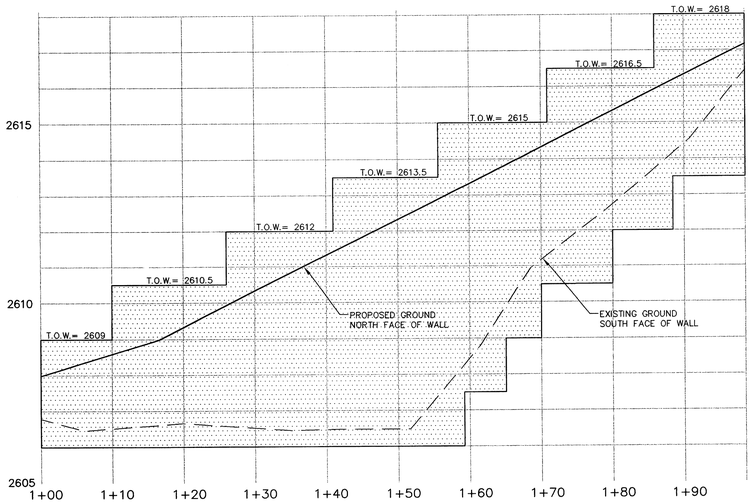
DATE	05/15/06
DRAWN	KSN/RWH
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05–079
DRAWING NO.	10 OF 11

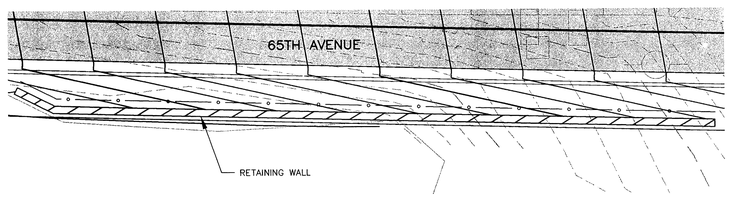
DETAIL

P-1784 Eng/Road-Drainage

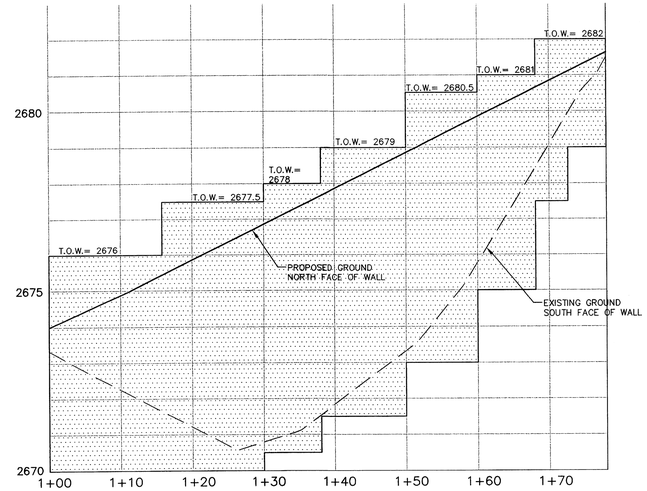
05079–b.DWG DETAILS

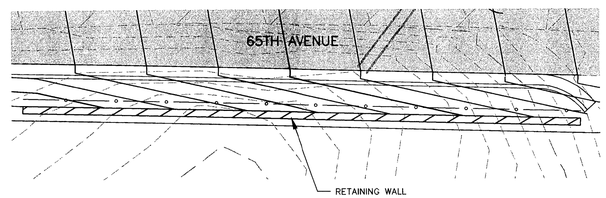
P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, DETAILS, 1:1, JSC



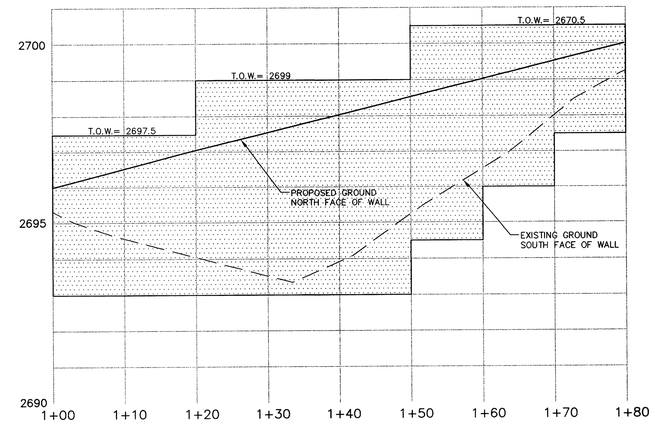


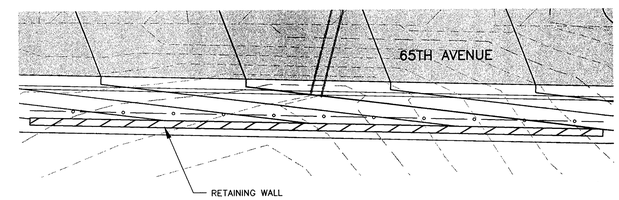
65TH. AVENUE WALL ROAD STA. 12+09.27 TO 13+07.22





65TH. AVENUE WALL ROAD STA. 18+73.09 TO 19+51.09

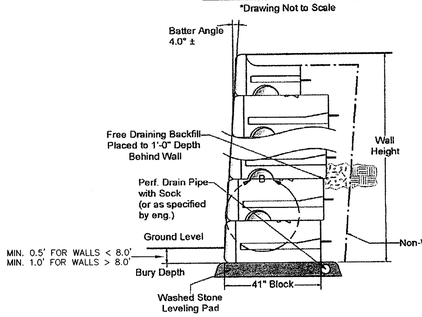


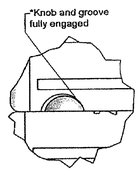


65TH. AVENUE WALL ROAD STA. 21+77.69 TO 22+57.69

TYPICAL GRAVITY WALL
41" GRAVITY BLOCK

*Drawing Not to Scale





DETAIL B

NOTES

1. RETAINING WALLS SHALL BE CONSTRUCTED IN ACCORDANCE TO "THIRD ADDENDUM TO REPORT OF RESULTS OF LIMITED GEOTECHNICAL ENGINEERING STUDY, PROPOSED STORMWATER DISPOSAL SYSTEM, MORAN VIEW ESTATES SUBDIVISION, SPOKANE, WA." BY CUMMINGS GEOTECHNOLOGY, INC.
2. RETAINING WALLS SHALL ADHERE TO ALL APPLICABLE MANUFACTURER STANDARDS AND SPECIFICATIONS.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1784
DATE ACCEPTED: 5/31/06
ACCEPTANCE EXPIRES: 5/31/08
PROJECT LANE MILES PUBLIC: 0.40
PROJECT LANE MILES PRIVATE: —
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
HORZ: 1 inch = 10 ft.
VERT: 1 inch = 2 ft.

Lee Campbell 5/16/06
DEVELOPER DATE

CALL BEFORE YOU DIG 456-8000

P-1784 Eng/Road/Drainage

No.	DESC. / DATE	BY
4		
3		
2		
1		

STORHAUG ENGINEERING
CIVIL ENGINEERING AND PROJECT MANAGEMENT
510 EAST THIRD AVE., SPOKANE, WA 99202
PHONE 509-242-1000 FAX 509-242-1001

SHEET TITLE: DETAIL SHEET

PROJECT TITLE: MORAN VIEW ESTATES
SPOKANE COUNTY, WA

SEAL: CARSTON B. MORTENSEN, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 5/16/06
EXPIRES 09-07-06

DATE	5/15/06
DRAWN	KSN
CHECKED	CBM
SCALE	AS SHOWN
PROJECT NUMBER	05-079
DRAWING NO.	11 OF 11
	DETAIL-2

05079-b.DWG DETAILS

P:_Projects\2005\05-079 Campbell Moran View\05079-b.dwg, DETAILS (2), 1:1, JSC